WEST BENGAL MEDICAL SERVICES CORPORATION LTD.

(Wholly owned by the Government of West Bengal)

Swasthya Sathi, GN-29, Sector-V, Salt Lake, Kolkata-700 091.

NOTICE INVITING TENDER DOCUMENTS FOR

Completion of the unfinished Construction work of Belda Super Speciality Hospital at Belda, Paschim Medinipur (2nd call)

(NIT Reference No. : WBMSCL/NIT- 241/2021, Dated – 16/07/2021)

WEST BENGAL MEDICAL SERVICES CORPORATION LIMITED

(Wholly Owned by the Government of West Bengal)
Registered Office: Swasthya Sathi, GN-29, Sector-V, Salt Lake, Kolkata– 700091
Phone: 033-4034-0300 ◊ Email: info@wbmsc.gov.in ◊ website: www.wbmsc.gov.in

I.T.B. No. : WBMSCL/NIT- 241/2021 Dated – 16/07/2021

SECTION - A

Managing Director, WBMSCL invites sealed bids through electronic tendering (e- Tendering) for "Completion of the unfinished construction work of Belda Super Speciality Hospital at Belda, Paschim Medinipur (2nd call)" from the bonafied, resourceful and reliable experienced Contractor in West Bengal.

Sl. No.	Name of the Work	Estimated Amount (Rs.)	Earnest Money (Rs.)		Period of Completion	Name & address of the Office
01.	Completion of the unfinished construction work of Belda Super Speciality Hospital at Belda, Paschim Medinipur (2nd call)	13,12,41,191.00	Pament to be done by online NEFT/RTGS in e-Tender portal)	Bank Guarantee	06 (Six months)	Managing Director, West Bengal Medical Services Corporation Limited, Swasthya Sathi Building, GN-29, Sector –V, Saltlake,
			5,24,823.00	21,00,000.00		

GENERAL CLAUSE OF NIT :

TWO BID SYSTEM

1.0 This NIT is of Two Bid Tender, i) Technical & ii) Financial, both to be submitted concurrently in the portal. The bidders who will be Technically qualified in respect to Technical and Financial eligibility/capability criteria specified in the below mentioned subsequent clause can only be permitted to participate in the Financial Bidding.

TENDER DOCUMENT

2.0 In the event of e-filling intending bidder may download the tender document from the website directly by the help of his Digital Signature Certificate & upload the same with other documents along with necessary Earnest Money electronically as mentioned in Cl 14 of NIT. (Details of which has been narrated in "Instruction to Bidders", i.e. Section A). Where an individual person holds a digital signature certificate in his own name duly issued to him by the company or the firm of which he happens to be director or partner, such individual person either belonging to and appropriate cadre officer of the company or an authorized partner of a firm, shall invariably upload a copy of Registered power of attorney showing clear authorization in his favour, to upload such tender. The power of attorney shall have to be registered in accordance with the provisions of the Registration Act, 1908.

a. Dully filled in copies of Section – B (Forms I to V & Affidavit) in prescribed proforma with proper dated signature in the relevant spaces to be uploaded electronically. **Documents in support of the information furnished in Forms I to V & Affidavit must be attached/uploaded for evaluation and the file number & page number has to be indicated in the respective column of the Form.**

b. Digitally signed Technical Bid and Financial Bid both to be submitted concurrently in the website https://wbtenders.gov.in. Tender Document may be downloaded from the website. Submission of Technical Bid & Financial Bid as per the date and time Schedule stated in Sl. No. 12 of this NIT. The documents submitted by the bidders should be properly indexed.

Eligibility Criterion for participation in the tender :-

3.0 i) **Credential :-**

(a) The prospective bidders shall have satisfactorily completed **AS A SOLE FIRM (NOT as a sub-contractor)** during the last 5 (five) years prior to the date of issue of this NIT at least one work of similar nature under the authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies under the statute of the Central/State Government and having a magnitude more than 40 (forty) percent in case of 1st call, 30% in case of 2nd call, 20% in case of 3rd call of the Estimated amount put to tender for intended job.

OR

(b) The prospective bidders shall have satisfactorily completed **AS A SOLE FIRM (NOT as a sub-contractor)** during the last 5(five) years prior to the date of issue of this NIT at least two works of similar nature under the authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies under the statute of the Central/State Government having a magnitude each of minimum value of 30 (thirty) percent in case of 1st call, 25% in case of 2nd call, 15% in case of 3rd call of the Estimated amount put to tender for intended job.

OR

(c) The prospective bidders should produce credential **AS A SOLE FIRM (NOT as a sub-contractor)** at least one single running work of similar nature which has been completed to the extent of 80% or more (75% in case of 2nd call, 70% in case of 3rd call) and value of which is not less than the value of 40% (30% in case of 2nd call, 20% in case of 3rd call) of the estimated amount put to tender of intended job under the authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies under the statute of the Central/State Government. **In the credential certificate it should be clearly stated that the work is in progress satisfactorily & also that no penal action has been initiated against the executing agency, i.e. the tenderer.**

N.B. - a) Estimated amount, Date of completion of project or percentage of physical progress of works for running works, value of works done, Salient feature & nature of work executed is to be mentioned in the Credential Certificate. Payment certificate will not be treated as credential. Credential Certificate issued by competent authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies constituted under the statue of the Central / State Government will be taken as credential. However, Credential Certificate issued to sub-contractor by Central or State Govt. undertaking/Govt. Enterprise shall not be accepted.

b) Executed value (without contractual percentage) of completed/running work will be taken as credential.

c) Work order of relevant work(s) to be submitted.

d) Similar Works/ Works of Similar Nature shall mean Construction of RCC framed non-residential complex / residential complex with all supporting facilities with works including Public Health, Internal and external electrical works, fire fighting works, HVAC works, Lifts, and external development, Diesel Generator Sets, Sewerage Treatment Plant, Chillers, roads, drains, landscaping including street lighting etc. works executed in India.

ii) TECHNICAL PERSONEL

The prospective bidders shall have full time engaged/appointed in their Pay roll experienced technical personnel, the minimum being one Civil Engineering Degree Holder and one Civil Engineering Diploma Holder (Authenticated documents in respect of qualification and engagement shall be furnished for Technical Evaluation).

iii) PAN Card, Valid Professional Tax Receipt Challan for the financial year 2021-22, Trade Licence, Valid GST Registration no. & certificate, Income Tax Acknowledgement Receipt for assessment year 2020-21 and Profit and loss balance sheet for the last 3 financial year 2018-19, 2019-20, 2020-21 is to be submitted with Technical Bid document.

iv) Registered Unemployed Engineers' Co-operative Societies/ Registered Unemployed Labour Co-operative Societies are required to furnish valid bye law, Current Audit Report.

v) Joint Venture will not be allowed.

vi) The prospective bidder should own / hired through lease agreement in between leaser & lessee as required plant & machinery. Conclusive of machinery in working condition shall have to be submitted (to be documented through e-filling).

vii) Intending bidder may make MOU with other vendors to fulfil the credential.

viii) The partnership firm shall furnish (a) Registration Certificate from Register of firms along with certified copy of Form-VIII issued under Indian Partnership Act, 1932, & (b) partnership deed shall have to be either Notarised / registered from ADSR and the company shall furnish (a) Incorporation Certificate & CIN (b) the Article of Association and Memorandum. (Non Statutory Documents).

BID CAPACITY

ix) **The available Bid Capacity at the expected time of bidding (to be calculated on the basis of prescribed format vide Form - V / Section B) of the prospective applicant shall not be less than the Estimated amount put to tender of intended job.**

x) A prospective bidder shall be allowed to participate in the particular job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job, all of his/their bids will considered as nonresponsive for that job, without assigning any reason thereof.

And

If individual entity is found to be present in more than one bidding firm for a specific Sl as a Proprietor or / and Partner / or POA (Power of Attorney), in that case all the bids of the respective firms containing that particular entity shall be considered as non-responsive.

xi) **Earnest Money : -** The bidder shall be required to deposit earnest money amounting to Rs. 26,24,824.00 (Rupees twenty six lakh twenty four thousand eight hundred twenty four only) to participate in the bid.

The Earnest Money to be submitted is an amount of Rs. 26,24,824.00 (Rupees twenty six lakh twenty four thousand eight hundred twenty four only), for which an amount of Rs. 5,24,824/- (Rupees five lakh twenty four thousand eight hundred twenty four only) may be transferred by way of net banking to the designated bank account as mentioned in the website https://www.wbtenders.gov.in and the balance Rs. 21,00,000/- (Rupees twenty one lakh only) may be furnished by way of a bank guarantee in favour of " West Bengal Medical Services Corporation Limited " issued by any scheduled bank and also to be documented through e-filling (scan copy is to be submitted). The original part of online submission of the bank guarantee comprising 80% of the Bid Security shall be submitted physically at the office of WBMSCL under sealed cover within the prescribed date and time limit stated in Sl. 10 of this e-NIT. However, WBMSCL will not be held responsible for late delivery or loss of the Bank Guarantee so mailed through post/courier.

4. Constructional Labour Welfare Cess @ 1 % (one percent) of the cost of construction will be deducted from every bill of the selected agency. GST, Royalty & all other Statutory Levy / Cess will have to be borne by the contractor. As the rates in the Schedule of rate are inclusive of GST & Cess as stated above.

5. The Bidder will have to submit the receipt of payment of **Royalty** to the Government for use of sand, stone materials, laterite, Moorum, gravel etc. to the Engineer-In-charge before preparation of bill for payment, when they collect the materials directly from the source. If they collect the materials from the authorized quarry holder or commercials establishment who directly or indirectly pay the royalty to the Government, necessary certificate or cash memo for sale in that respect from them shall have to be produced to the Engineer-In- Charge failing which necessary deduction from the dues of the contractor may be made as fixed by the Engineer-In-Charge.

6. **Bids will remain valid for a period not less than 120 days (One Hundred Twenty days) from the date of opening of the financial proposal**. However, extension of bid validity may be suitably considered by the Tender Inviting Authority, if required, subject to obtaining written confirmation of the contractor/bidder(s) to the effect. If the bidder withdraws the Bid during the period of Bid validity his Earnest Money Deposit will be forfaited.

7. All materials including bitumen (of all grade), bitumen emulsion, cement, steel shall be of approved brand in accordance with relevant code of practice and manufacture accordingly and shall be procured and supplied by the agency at their own cost. Authenticated evidence for purchase of bitumen, bitumen emulsion, cement and steel are to be submitted along with challan and test certificate. If required by the Engineer in Charge, further testing from any Government approved Testing laboratory shall have to be conducted by the agency at their own cost.

8. Steel materials Procure & Supply by the Contractor shall be of TOR Steel Rod / HYSD / TMT Bar of Fe415, Fe500, Fe500 / 550D grade as per specification guided by relevant IS Code (The grade to be decided by the Engineer–In–Charge or as per instruction on specified in the approved

drawing of this department or as stipulated in the departmental schedule of rates.

9. Cement Procure & Supply by the Contractor shall be of ordinary Portland cement 53 grade, 43 grade, conforming (IS 8112) or PPC/PSC the grade to be decided by the Engineer–In–Charge or as per instruction on specified in the approved drawing of this department or as stipulated in the departmental schedule of rates.

PRICE ADJUSTMENT / PRICE PREFERENCE

10. i) No adjustment of Price or Price Escalation of any kind will be allowed. Adjustment of price (increase or decrease).
    ii) No price preference will be allowed for the work under this NIT.
10. No Mobilization Advance / Secured Advance will be allowed.

11. Prospective applicants note carefully the minimum qualification criteria as mentioned in instruction to bidders before tendering the bids.

12. No Conditional Bid / Tender will be accepted under any circumstances.
13. Requirement of Principal Machineries which must be possessed by [Non Statutory Document] by the Bidders.

14. Before uploading tender document through e-filing each page of the tender documents are to be signed by the Bidder/ owner/ partner / authorized signatories having legal authority to do so, failing which the Bid will be treated as informal.

15. The employer reserves the right to accept or reject any / all offer without assigning any reason whatsoever and is not liable for any cost that might have incurred by the Bidder at the stage of Bidding.

    The Bidders Net Worth for the last year calculated on the basis of capital, Profit and free reserve available to the firm should be positive.

16. IMPORTANT INFORMATION

    A. Current Schedule of Rates for P.W.D.(Building works) circle Schedule with effect from 01.11.2017 & with latest addendum & Corrigendum of P.W.D, Government of West Bengal for civil works and P.W.D Schedule of rates for Electrical Works with effect from 01.11.2017 as well as market rates will be applicable in this Tender including 1% cess.

    B. <u>DATE & TIME SCHEDULE</u>

Sl. No.	PARTICULAR	DATE & TIME
i)	Date of uploading of N.I.T and Tender Documents (online)	16.07.2021
ii)	Documents Sell / download start date (online)	16.07.2021 at 06.00 P.M.
iii)	Date of Pre-bid meeting	22.07.2021 at 01.00 P.M.
iii)	Bid Submission Upload Start date (online)	26.07.2021 at 04.00 P.M.
iv)	Bid Submission Upload End date (online)	06.08.2021 upto 03.00 P.M.
v)	Last date of submission of hard copy of the Bank -	09.08.2021 upto 3.00 P.M.
vi)	Date & Place for Opening of Technical bid (online) for the Bidders	09.08.2021 at 4.00 P.M.
vii)	Date & place for opening of financial proposal	To be notified later

C: LOCATION OF CRITICAL EVENTS

Bid Opening: "West Bengal Medical Services Corporation Limited, Swasthya Sathi Building, GN-29, Sector –V, Saltlake, Kolkata-700091" Interested bidder may be presented at West Bengal Medical Services Corporation Limited, Swasthya Sathi Building, GN-29, Sector –V, Saltlake, Kolkata-700091 during opening of bid. Managing Director, West Bengal Medical Services Corporation Limited may call open bid /sealed bid after opening of the said bid to obtain the suitable rate further, if it is required. No objection in this respect will be entertained if raised by any bidder present or absent during opening of tender.

17. In case of any unscheduled holiday on the aforesaid dates [Sl. (v)], the next working day will be treated as schedule / prescribed date for the same purpose.

18. The successful Bidder shall have to execute Formal Agreement with Managing Director, West Bengal Medical Services Corporation Limited within 7(Seven) days from the issuance of Provisional Work order.

19. **Bank guarantee as Performance Security Bank Guarantee @ 3% of the contract value is to be submitted for the purpose of the security deposit with reference to finance department, Govt. of West Bengal order no. 201-F(Y) dated – 18th January, 2021.**

20. Agency shall have to arrange required land for installation of Plant & machineries (Specified for the awarded work), storing materials, labour shade etc. at their own cost and responsibility nearest to the work site.

21. The intending bidder(s) required to quote the rate **(percentage above/below/at par)** over the total estimated cost put to tender online considering that no escalation and / or price adjustment will be allowed by the department under any circumstances.

22. The Bidder has to visit and examine the site of works and its surroundings and obtained all information that may be necessary for preparing Bid and entering into an agreement for the work / works as mentioned in the NIT. The costs for visiting the working site shall be at the bidders own expense.

23. The Working Capital shall not be less than 15% (fifteen) percent of the amount put to tender out of which minimum10% (ten) percent shall be of the applicant's own resource. [Non Statutory Documents (Financial Statement)]

24. Prospective Bidder shall have to execute the work in such manner so that appropriate service level of the Building under improvement is to be maintained during progress of the work and during ***Defect Liability Period of 3(three) Year*** for the works from the date of successful completion of the work up to the entire satisfaction of the Engineer in Charge. If any defect / damage is detected during this period as mentioned above the contractor shall make the same good at his own expense to the satisfaction of the Engineer in Charge or in default the Engineer in Charge may cause the same to be made good by other agency and deduct the cost (of which the certificate of the Engineer in Charge shall be final) from his security deposit or any sums that may be then, or at any time thereafter become due to the contractor. Security Deposit shall become payable only after expiry of the ***Defect Liability Period*** after making necessary deduction if applicable.

25. If more than one Bidder quoted same rate and which are found lowest at the time of opening, such similar multiple rates will not be entertained / accepted. Lowest offer will be ascertained by sealed bid amongst the lowest bidder.

26. At any stage during scrutiny, if it is found that the credential or any other papers which the Bidder uploaded during Bidding process, found incorrect / manufactured / fabricated, that bid will be considered as non- responsive and outright rejected with forfeiture of Earnest Money and action will be taken as per stipulation of IT Rules in force.

27. List of "Technically Qualified Bidders" will be published in the web portal only. Financial Bid will be opened within a short period after such publication. Therefore, Bidders are requested to view the tender status on a regular basis. In case of there be any objection regarding Pre-qualification / list of "Technically Qualified Bidders", that objection should be lodged to the Managing Director, WBMSCL within 48 hours from the date of publication of list of qualified Agency and beyond that time schedule no objection will be entertained by the Tender Evaluation Committee

28. Before issuance of Letter of Acceptance / Provisional Work order, the tender accepting authority may verify the credential & other documents of the lowest bidder so uploaded online if found necessary. If it is found such document incorrect/ manufactured / fabricated, Letter of Acceptance / Provisional Work order will not be issued in favour of the bidder under any circumstances and action will be taken accordingly.

29. In case of Ascertaining of Authority at any stage of application or execution of work, necessary registered Power of Attorney is to be produced.

30. The Earnest Money may be forfeited if;-
    a) If the Bidder withdraws the Bid during the period of Bid validity.

b) In case of successful Bidder, if the Bidder fails to execute formal agreement within the stipulated time period.

c) During scrutiny, if it is come to the notice of tender inviting authority that the credential or any other document which were uploaded & digitally signed by the Bidder are incorrect / manufactured / fabricated.

31. If any discrepancy arises between two similar clauses on different notifications, the clause as stated in later notification will supersede former one in following sequence;-
    a) Notice Inviting Tender
    b) Special Terms and Conditions
    c) Financial Bid
    d) Schedule of Works (as per B.O.Q)

    All works covered in the clause appearing hereinafter shall be deemed to form a part of the appropriate item or items of works appearing in the work schedule whether specifically mentioned in any clause or not and the rates quoted shall include all such works unless it is otherwise mentioned that extra payment will be made for particular works.

32. **The bidders must have valid Electrical Contractors' License with full time engagement of an Electrical Supervisor Competency on the parts 1, 2, 4, 6A, 6B, 7A, 7B, 9, 11 & 12 or equivalent National Supervisors' Certificate of competency (Self Attested scan copy of valid "Electrical Contractors' License," "Supervisors' Certificate of Competency" and authentic Notarized document regarding engagement of Electrical Supervisors as submitted to the licensing board, "Govt. of West Bengal" require in Non-Statutory document).**

33. Prospective bidders must have sufficient credentials to participate in the tender as per notification of Clause No 3.

34. For any typographical mistake in case of Unit, Rate, Quantity, Amount, any type of nomenclature in items of works/item itself including description etc. whatsoever as stated in BOQ, that can't be claimed during agreement or so. In that case sanctioned estimate will be binding criteria.

35. As per memorandum no. 4608-F(Y) dated.18.07.2018 of Finance Department Govt. of West Bengal, the successful bidder will have to submit Additional Performance Security @10% of the tendered amount, if the accepted bid value is 80% or less of the estimated amount put to tender. The Additional Performance Security shall be submitted in the form of Bank Guarantee from any Scheduled Bank before issuance of the Work Order. If the bidder fails to submit the Additional Performance Security within seven working days from the date of issuance of Letter of Acceptance, his Earnest Money will be forfeited and other necessary actions as per NIT like blacklisting of the contractor, etc, may be taken. The Bank Guarantee shall have to be valid upto end of the Contract Period and shall be renewed accordingly, if required. The Bank Guarantee shall be returned immediately on successful completion of the Contract. If the bidder fails to complete the work successfully, the Additional Performance Security shall be forfeited at any time during the pendency of the contract period after serving proper notice to the contractor. Necessary provisions regarding deduction of security deposit from the progressive bills of the contractor as per relevant clauses of the contract shall in no way be altered/affected by provision of this Additional Performance Security.

36. The bidders whose technical bids are found defective to explain their position within 07 (seven) working days either through e-Mail or sending hard copy through any messenger. After receiving the clarification on deficiency, the authorities would be justified in taking appropriate decision on the admission / rejection of the bid considering the merit of each case.

The eligibility of the Bidder will be ascertained on the basis of document submitted / uploaded & digitally signed in support of the minimum criterion as mentioned above. If any document submitted / uploaded by the Bidder is either manufactured or false the eligibility of Bidder will be out rightly rejected at any stage without prejudice and action will be taken as per stipulation of IT Rules in force.

Sd/-
Managing Director
West Bengal Medical Services Corporation Limited

SECTION -B
Payment Schedule

Payment will be made according to B.O.Q.

INSTRUCTION TO BIDDERS

SECTION – C

General guidance for e-Tendering

Instructions/ Guidelines for tenders for electronic submission of the tenders online have been annexed for assisting the contractors to participate in e-Tendering.

1. Registration of Contractor Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to ***https://etender.wb.nic.in.*** The contractor is to click on the link for e-Tendering site as given on the web portal.
2. Digital Signature certificate (DSC) Each contractor is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders, from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount details are available at the Web Site stated in Clause-2 of Guideline to Bidder DSC is given as a USB e-Token.
3. The contractor can search & download NIT & Tender Documents electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.
4. Participation in more than one work a prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job, all his applications will be rejected for that job.
5. **Submission of Tenders/General process of submission:** Tenders are to be submitted through online to the website stated in Cl. 2 in two folders at a time for each work, one in Technical Proposal & the other in Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC) The documents are to be uploaded (virus scanned copy) duly Digitally Signed. The documents will get encrypted (transformed into non readable formats). A. Technical & Financial proposal: The proposal should contain scanned copies of the following in two covers (folders).

A-1. Statutory Cover file Containing.

Technical Bid:

i) Earnest money (EMD) as prescribed in the NIT
ii) NIT
iii) Forms (As mentioned in the NIT, Section-D)

Financial Bid:

iv) The rate will be quoted in the BOQ quoted rate (as per schedule of works in the form of annexure) will be encrypted in the B.O.Q. under Financial Bid.
v) Annexure 'A'(Schedule of works)

A-2. Non statutory / Technical Documents

i. Current Income Tax return (for the assessment year 2020-21), PAN, GST Registration Certificate, Professional Tax receipt challan for the financial year 2021-22 and Profit and loss balance sheet for the last 3 financial year 2018-19, 2019-20, 2020-21
ii. Valid enlistment renewal certificate
iii. Registered Deed of partnership Firm
iv. Trade License from the respective Municipality/Panchayet etc. (in case of S & P Contractors only)
v. Certificate of Registration' from the respective Assistant Registrar of Co – operative Societies (for Regd. Unemployed Engineer's Co – Operative Society Ltd.)
vi. Requisite Credential Certificate as mention in Clause [3(i)] of this N.I.T.
vii. Electrical Contractors' License with full time engagement of an Electrical Supervisor Competency on the parts 1, 2, 4, 6A, 6B, 7A, 7B, 9, 11 & 12

Note: Failure of submission of any of the above mentioned documents will render the tender liable to be rejected for both statutory & non statutory cover.

THE ABOVE STATED NON-STATUTORY/TECHNICAL DOCUMENTS SHOULD BE ARRANGED IN THE FOLLOWING MANNER

Click the check boxes beside the necessary documents in the My Document list and then click the tab "Submit Non Statutory Documents' to send the selected documents to Non-Statutory folder. Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents.

Sl. No.	Category Name	Sub Category Descriptio	Details
A.	CERTIFICATES	CERTIFICATES	Current Income Tax return (for the assessment year 2020-21), PAN, GST Registration Certificate & Professional Tax receipt challan for the financial year 2021-22, Profit and loss balance sheet for the last 3 financial year 2018-19, 2019-20, 2020-21, Trade License, Electrical Contractors' License with full time engagement of an Electrical Supervisor Competency on the parts 1, 2, 4, 6A, 6B, 7A, 7B, 9, 11 & 12
B.	Company Details	Company Details – I	'Certificate of Registration' from the respective Assistant Registrar of Co – operative Societies (for Regd. Unemployed Engineer's Co – Operative Society Limited)
C.	Credential (in applicable cases)	Credential	1. Documents of Credential (in the form of work completion certificates and payment certificates) as mentioned in Clause No. [2(i)]

B.Technical proposal

i. Opening of Technical proposal: - Technical proposals will be opened by the Managing Director, West Bengal Medical Services Corporation Limited and his authorized representative electronically from the web site stated using their Digital Signature Certificate.

ii. Intending bidders may remain present if they so desire.

C.Financial proposal

i) The financial proposal should contain the following documents in one cover (folder) i.e. Bill of quantities (BOQ). The contractor is to quote the rate **(Offering Above/ Below/ At per)** online through Computer in the space marked for quoting rate in the BOQ and also digitally signed and upload the Schedule of works given in the format of Annexure)

ii) Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor.

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PENALTY FOR SUPPRESSION / DISTORTION OF FACTS OR SUBMISSION OF INCORRECT INFORMATION:

If any tenderer fails to produce the original hard copies of the documents (specially Completion Certificates and audited balance sheets), or any other documents on demand of the Tender Opening Authority within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies or if there is any suppression of facts, the Tenderer will be suspended from participating in the tenders on e-Tender platform for 3 (three) years. In addition, his user ID will be deactivated and Earnest Money Deposit will stand forfeited. Besides, WEST BENGAL MEDICAL SERVICES CORPORATION LIMITED may take appropriate legal action against such tenderer.

AWARD OF CONTRACT

The Tender Inviting Authority reserves the right to accept or reject any Tender and to cancel the Tendering process and reject all Tenders at any time and prior to the Award of Contract without therby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Bidder or Bidders of the ground for Employer's action.

The Bidder whose Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter/email..

The notification of award will initiate the execution of agreement.

The Agreement in prescribed composite Tender Form will incorporate all agreements between the Tender Accepting Authority and the successful Bidder. All the tender documents including NIT B.O.Q, STC & TF. will be the part of the Contract Documents.

D. (i)Special Terms & Conditions for Machineries,Tools and Plants as follows.

(i) Welding Machine (ii) Grout Pump iii) Drilling Machine iv) Mixer Machine, v) Road Roller, vi) Safety equipments etc.

All plants, machineries and equipment will be verified by the competent authority before execution of the work.

SECTION – D

FORM –I

B.1. PRE-QUALIFICATION APPLICATION.

To
Managing Director,
West Bengal Medical Services Corporation Limited

Ref: - Tender for _____
_____work_____
_____
_____

N.I.T. No: WBMSCL/NIT- 241/2021, Dated –16/07/2021 of West Bengal Medical Services Corporation Limited

Dear Sir,
Having examined the Statutory, Non statutory, Instruction to Bidders & NIT documents along with its Agenda & corrigendum, I /we hereby submit all the necessary information and relevant documents for evaluation

The application is made by me / us on behalf of _____

In the Capacity _____ duly authorized to submit the order.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms for Application and for completion of the contract documents is attached herewith. We are interested in bidding for the work(s) given in Enclosure to this letter.

We understand that:

(a) Tender Inviting & Accepting Authority/Engineer-in-Charge can amend the scope & value of the contract bid under this project.
(b) Tender Inviting & Accepting Authority/Engineer-in-Charge reserve the right to reject any application without assigning any reason.

(c) Enclo:- e-Filling:-
(d) 1. Statutory Documents.
(e) 2. Non Statutory Documents.

_____

Date: -

Signature of applicant including title and capacity in which application is made.

SECTION – D

FORM - II

B.2. AFFIDAVIT – "X"

(To be furnished in Non – Judicial Stamp paper of appropriate value duly notarized)

Work in progress.

Sl.	Name of the work.	Tender No.	Tendered Amount.	% of work Executed.

Work order issued but work not started.

Sl.	Name of the work.	Tender No.	Tendered Amount.	Status.

_____

Signature

Date: ----------

_____

Name of the Firm with Seal.

SECTION – D

FORM- III

B.3. STRUCTURE AND ORGANISATION.

B.3.1. Name of applicant::_____

B.3.2. Office Address:: _____

_____

Telephone No.::_____

Fax No. **::**_____

E-mail ID :: _____

B.3.3. Name & address of Bankers::_____

_____

_____

B.3.4. Attach an organization chart showing the structure of the company with names of Key personnel and technical staff with Bio-data.

Note: Application covers Proprietary Firm, Partnership, Limited Company or Corporation,

_____

Date: **Signature of applicant.**

including title and capacity in which application is made.

FORM – IV

B.4. EXPERIENCE PROFILE.

B.4.1. Name of the Firm:_____

_____

B.4.2. LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE WORKS HAVING MORE THAN 40% OF THE PROJECT COST EXECUTED DURING THE LAST FIVE YEARS.

Name, Location & nature of work	Deptt. Concern	Engineer-in-Charge	Contract price in Indian Rs.	% of Participation of company	Original Time Schedule		Actual Time Schedule		Reasons for delay in completion (if any)
					Start Date	Completion Date	Start Date	Completion Date	

Note: a) Certificate from the Employers to be attached

b) Non-disclosure of any information in the Schedule will result in disqualification of the firm.

Date:

_____

Signature of applicant

including title and capacity in which application is made.

FORM -V

**** UDIN mention is mandatory for the Turn Over to be taken for calculation of Bid Capacity.****

(Information of Audited Financial Statement for the last year to demonstrate the current soundness of the Bidder's Financial Position)

1) The bidder's net worth for the last year calculated on the basis of capital, profit and free reserve available to the firm should be positive.
2) Bidders, who meet the minimum Qualification criteria, Will be qualified only of their available **Bid Capacity** will be calculated as under :

[Assessed Available Bid Capacity = (A x N x 2 – B) where]

A = **Maximum value of engineering works in respect of project executed in any one year during the last five years (uploaded to the price level on the year indicated in table below under note) taking into account the completed as well as works in progress. The project includes turnkey project / Item rate contract / Construction work.**

N = **Number of Year (i.e. ____ year) prescribed for completion of the works for which Bids are invited.**

B = **Financial Liability of the bidder to be incurred for existing commitments and on-going works during the period of the subject contract.**

To Calculate the value of "A"

i) A table containing value of Engineering Works in respect to Projects (Turnkey project / Item rate contract / Construction Work) undertaking by the bidder during the last 5 years is as follows :

Sl. No.	Year	Value of Engineering Works undertaken w.r.t. Project (Rs. In Crore)
1.	Year – 5	
2.	Year – 4	
3.	Year – 3	
4.	Year – 2	
5.	Year – 1	

ii) Maximum value of project that have been undertaken during the Financial Year _____ out of the last 5 Years and value there of Rs. _____ (Crore) (Rupees _____). Further, value updated to the price level of the year indicated in Table is as follows :

Rs. _____ Crore X _____ (Updation Factor as per Table annesed)
= Rs. _____ Crore (Rupees _____)
Table indication The factor for the Year for upsation to the price level is indicated as under

Sl. No.	Year	Updation factor
1.	Year – 1	1.00
2.	Year – 2	1.05
3.	Year – 3	1.10
4.	Year – 4	1.15
5.	Year – 5	1.20

iii) Net worth for the last year of _____ (Name of the company)

iv) Working CapitalRs. _____.

_____ _____ **Signature, Name and designation of Authorised Signatory**	_____ _____ **Name of the Statutory Auditor's firm:** **Seal of the Auditor's firm :**

To calculate the value of "B"

3. A table # containing value of all the existing commitments and on- going workings to be completed during the next _____ years (prescribed time for completion of the works for which Bids are invited) is as follows:

Sl No.	Name of work / project	Name of the Employer	Percentage of participation of Bidder in the project	Stipulated period of completion as per Agreement/LOA with the start date	Value of Contract as per Agreement / LOA Rs. _	Value of work completed Rs. ___	Balance value of Work to be completed Rs._____	Anticipated date of completion Rs._____	Financial liability to incurred for the said work/ project during the period of period of the subject contract. Rs._____
1	2	3	4	5	6	7	8	9	10
					____				

_ _ _
_—————————_—————_
_____ _____

Signature, Name and designation of Authorised Signatory

_____
_____

Name of the Statutory Auditor's firm:
Seal of the Auditor's firm :

Note:

1. **All the documents including that showing the calculation of the value of financial liability "B" as above to be submitted in support of Annexure –A must be duly signed and sealed by the applicant / bidder and authenticated by statutory Auditor's firm.**

2. **In case of Joint Venture, Lead Member of such joint venture shall be required be meet 60% of required Bid capacity and each of the joint Venture Members shall be required to meet at least 30% of requirement of Bid capacity. Bid capacity of all the members in total should be at least 100% of required Bid capacity.**
3. **In case of Joint Venture, Net Worth for each partner of the Joint Venture should be positive, which shall be calculated as follows :**

    i) **If Joint Venture is a Company, Net Worth should consist of share capital, profit and free reserve available to the Company.**
    ii) **If Joint Venture is a partnership or proprietary firm, Net Worth should consist of capital, profit and free reserve available to the firm.**

[Print out in Agency's Letter head & upload the filled proforma with digitally signed as stated below]

DECLARATION BY THE TENDERER

I/We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. I /We have carefully gone through the Notice Inviting Tender and other tender documents mentioned therein along with the drawing attached. I/We have also carefully gone through the 'Priced schedule of Probable Items and Quantities'.

My/Our tender is offered taking due consideration of all factors regarding the local site conditions stated in this Detailed Notice Inviting Tender to complete the proposed work referred to above in all respects.

I/We promise to abide by all the stipulations of the contract documents and carry out and complete the work to the satisfaction of the department.

I/We declare that I/We in the capacity of individual/ as a partner of a firm not debarred in the last financial year.

I/We also agree to procure tools, plants and others as per requirement, at my/our cost required for the work.

Signature of Tenderer

Date :

Postal address of the Tenderer

Name of the Firm with Seal

FORM VI

BID SECURITY BANK GUARANTEE

[Bank's Name and Address of Issuing Branch or Office]

Beneficiary: West Bengal Medical Services Corporation Limited, having its registered office at Swasthya Sathi, GN- 29, Bidhannagar, Sector – V, Salt Lake, Kolkata-700 091

A/c. No.: 105605003391

Name of account holder: West Bengal Medical Services Corporation Limited

Bank name and branch: ICICI Bank, Bidhan Nagar Branch

IFS Code: ICIC0001056

Bid Security No:

We have been informed that .....name of the bidder..... (hereinafter called "the Bidder") has submitted to you its bid dated..... (hereinafter called "the Bid") for the execution of contract for "Completion of the unfinished construction work of Belda Super Speciality Hospital at Belda, Paschim Medinipur" (the "NIT").

Furthermore, we understand that, according to your conditions, bids must be supported by a Bid Security.

At the request of the bidder, we [Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of Rs. 21,00,000.00/- (Rupees twenty one lakh only) upon receipt by us of your first demand in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions, because the bidder :

(a) If a bidder withdraws its bid during the period of bid validity, except as provided in ITB 17.2;

(b) If a bidder engages in a corrupt, fraudulent, coercive, collusive or restrictive practice as specified in ITB 3.1;

(c) If a bidder is declared disqualified in terms of ITB 4.3;

(d) If a bidder is otherwise in breach of the terms of the Bidding Documents, or,

(e) In case of a Selected Bidder, if it fails or refuses to furnish the Performance Security within the scheduled time period as per ITB 38.1.

This guarantee will expire: (a) if the bidder is the Selected Bidder, upon receipt of copies of the Agreement signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder, and (b) if the Bidder is not the Selected Bidder, upon the earlier of (i) our receipt of a notice from you that the Performance Security has been received from the Selected Bidder, or (ii) 180 days from the date hereof.

This Guarantee will not be discharged due to the change in the constitution of the Bank or the Bidder.

This Guarantee will neither be cancelled nor revoked by the Bank without the written authorization of West Bengal Medical Services Corporation Limited.

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

[Bank's seal and authorized signature(s)]

FORM - VII
FORM OF PERFORMANCE SECURITY BANK GUARANTEE

In consideration of the Employer having agreed under the terms and conditions of contract made vide his Notification of Award No.--------dated ------ between West Bengal Medical Services Corporation Ltd. (WBMSCL) (the Employer) represented by its Managing Director and _____(hereinafter called "the said Contractor) for "Completion of the unfinished construction work of Belda Super Speciality Hospital at Belda, Paschim Medinipur" (herein after called the said Agreement") the Contractor having agreed to production of a irrevocable Bank Guarantee for Rs. ----------(Rupees ----------Only) as a Security/Guarantee for compliance of his obligations in accordance with the terms and conditions in the said Agreement:

1. We ---------- (indicate the name of the Bank) (hereinafter referred to as "the Bank" hereby undertake to pay to the WEST BENGAL MEDICAL SERVICES CORPORATION LTD., an amount not exceeding Rs. -------- (Rupees ----------only) on demand by WBMSCL.

2. We ----------(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from WBMSCL for and on behalf of the Employer as an Agent/Power of Attorney Holder stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs.---------- (Rupees ----------only).

3. We, the said Bank further under take to pay to the Employer represented by WBMSCL for and on behalf of the Employer as an A gent/Power of Attorney Holder any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceeding pending before any court or Tribunal relating thereto, our liabilities under this present being absolute and unequivocal. The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the Contractor shall have no claim against us for making such payment.

4. We --------- (Indicate the name of the Bank) further agree that the Guarantee herein contained shall remain in full force and effect for a period of 12 months from the date of issue and upon being extended for similar periods of 12 months each, it shall continue to be enforceable till all dues of the Employer under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Employer's Representative on behalf of the Employer certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor and accordingly discharges this Guarantee.

5. We ---------- (indicate the name of the Bank) further agree with the Employer, that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations

hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Contractor(s) and to forbear from or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Employer or any indulgence by the Employer to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

7. This Guarantee will neither be cancelled nor revoked by the Bank without the written authorization of WBMSCL. For this purpose, the beneficiary WBMSCL would inform the Bank of their authorized signatories together with the specimen signatures.

8. This Guarantee shall be valid up to a period of 12 months from the date of issue unless extended on demand by the Employer. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. ---------- (Rupees ---------- Only) and unless a claim in writing is lodged with us within the date of expiry or the extended date of expiry of this Guarantee, all our liabilities under this Guarantee shall stand discharged.

Dated the ---------- day of ---------- for ---------- (indicate the name of the Bank)".

Note : To be put in sealed cover by Bank and addressed to the concerned officer of WBMSCL.

PRINTED TENDER FORM

WEST BENGAL MEDICAL SERVICES CORPORATION LIMITED

PRINTED TENDER FORM

eNIT no. – WBMSCL/NIT-241/2021 Dated – 16/07/2021

TENDER AND CONTRACT FOR WORKS GENERAL RULES AND DIRECTIONS FOR GUIDANCE OF BIDDERS/CONTRACTORS

1. All works of tender value above Rs. 5.00 lakh proposed for execution through this contract document are to be notified and published in the form of notice inviting e-tender (e-NIT) in the designated official tender website of Government of West Bengal having URL https://wbtenders.gov.in, and uploaded simultaneously in the URL of concerned Department inviting Tenders. Thus the tender may be seen and downloaded by logging into the "e-procurement" link provided therein, digitally signed by the concerned Tender Inviting Authority and its corresponding abridged notice also published on the same date in the print media.

2. This e-Notice Inviting Tender (e-NIT) will state the work to be carried out, the date for encrypting (submitting) and decrypting (opening) of e-tenders, the time allowed for carrying out the work; amount of earnest money to be deposited with the e-tender; procedure for submission of EMD, amount of security to be furnished by the successful bidder/contractor, security/ performance security to be deducted from running account bills, copies of specifications, Bill of Quantities, design and drawings and any other document required in connection with the work, digitally signed for the purpose of identification by the Tender Inviting Authority.

3. Intending contractors/bidders are required to download the e-tender documents directly from the website stated above. Tender is required to be submitted online by the intending bidders by authorized e-Tokens provided as DSC. This is the only mode of e-submission of tender and document(s). All information posted in the website consisting of e-NIT, WB Form No. 2911, Tender Bill of Quantities (BOQ), corrigenda notices and drawings etc., if any, shall form part of the Contract. Details of procedure of submission have been explained under "General Terms & Conditions" and Annexure attached with the notice of e-tender (e-NIT).

4. All the documents uploaded by the Tender Inviting Authority forms an integral part of the tender contract/agreement. Contractors/bidders are required to upload the entire set of tender documents along with other related documents as asked for in the e-tender through the above website(s) within the stipulated date and time as given in the e-NIT. Tenders are to be submitted in two folders at a time for each work, one being the 'Technical Bid' and the other 'Financial Bid'. The contractor/ bidder shall carefully go through all the documents and prepare to upload the scanned documents in Portable Document Format (PDF) in the designated link in the web portal as their Technical Bid. He/she needs to fill up the rates of items/percentage in the BOQ downloaded for the work in the designated cell and upload the same again in the designated link in the portal as their Financial Bid. Documents uploaded are virus scanned and digitally signed using the Digital Signature Certificate (DSC). Contractors/bidders should especially take note of all

the addenda and corrigenda related to the e-tender and upload all of these documents also as a part of their tender document.

5. Documents uploaded by the contractors/bidders with all information & rates comprising Technical and Financial bids cannot be changed after last/end date for submission of the e-tender.

6. Deed of Consortium/Partnership Firm, and documents of their registration in the form of certified copy of 'Form No. VIII,' issued under the Indian Partnership Act, 1932 (Act-IX of 1932), GST, & PAN (Permanent Account Number) as per RBI guidelines/above Rs. 50,000/- may be compulsorily furnished for all contracts and all other statutory clearances defined in the e-NIT.

7. The tender evaluation and accepting authorities reserve the right to reject any or all of the tenders without assigning any reasons and he/she will not be bound to accept either the lowest tender or any of the tenders.

8. Withdrawal of e-Tender once the bid has been submitted online and after passing of end date for submission which has been accepted for further processing is not allowed. EMD will be forfeited by the Government and the bidder/contractor penalized in terms of provisions in the notice of the tender.

9. Generally Bids will be valid for 120 days from the date of opening of the financial proposal. However, extension of bid validity may be suitably considered by the Tender Inviting Authority, if required, subject to obtaining a written confirmation of the contractor/bidder(s) to that effect.

TENDER FOR WORKS

I/We on behalf of the Governor hereby tender for the execution of the work specified in the underwritten "Memorandum" within the time specified in such "Memorandum" at the rates specified therein, and in accordance, in all respects within the Rules contained in clauses hereinafter, in all of the annexed General Conditions of Contract (GCC), Special Conditions of Contract (SCC) and with such other materials as are provided for, by and in all other respects in accordance and with such conditions so far as applicable.

MEMORANDUM

(a) General description of work .....

(a) If several sub-works are included, they should be detailed in a separate list

(b) Estimated cost put to Tender ... Rs

(c) Earnest Money Deposit ... Rs.

(d) Security Deposit (including earnest money) ... Rs

(e) Percentage, if any, to be deducted from bill ... Rs
.....
(Rupees.....
Percentage.....)

(f) Time allowed for the work from date of written order to Commence .....calendar months.

For offline tender during submission of bid and during execution of Agreement for online tender

Name of Work Tendered	Amount Put to Tender	Rate Quoted by the Bidder (% above or less or at par)	Tendered Amount (Contract Price both in words & figures)

_____

_____

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

**Give particulars and numbers*

Strike out (a) or (b) as applicable.

A sum of Rs ..... * has been furnished through online net banking/RTGS/NEFT transfer as earnest money deposit [(a) the full value of which is to be absolutely forfeited to the Governor or his/her successors in office, without prejudice to any other rights or remedies of the said Governor or his successors in office. Should I/we not deposit the full amount of security specified in the above 'Memorandum' in accordance with clause I(A) of the said conditions of contract, the said sum of Rs ..... shall be retained by the Government as on account of such security as aforesaid:(b) the full value of which shall be retained by Government on account of the security deposit specified in clause I (B) of the said conditions of contract].

T Signature of Contractor before submission of tender

Dated the Day of 20

X T

(Witness)
Address
Occupation

X Signature of Witness to Contractor's signature

XX Signature of the Executive Engineer/AE on behalf of the Department.

The above tender is here by accepted by me for and on behalf of the Governor of the State of west Bengal

XX

Dated the _____ Day of _____ (Month) _____ (Year)

GENERAL CONDITIONS OF CONTRACT

Clause 1 1.1 Earnest Money - The person/persons who intend to participate in the Tender for an Estimated Amount up to Rs. 25 (Twenty Five) Crore shall have to deposit Earnest Money @ 2% (Two percent) of the Estimated Amount put to Tender or Rs 10 Lakh, whichever is lower.

In case of offline tender earnest money is to be submitted in the form of Bank Draft or Bankers Cheque.

In case of Online Tender (e-Tender) earnest money is to be deposited through e-tender portal (https://wbtenders.gov.in) by selecting from either of the following payment modes:

i) Net banking (any of the banks listed in the ICICI Bank Payment gateway) in case of payment through ICICI Bank Payment Gateway.
ii) RTGS/NEFT in case of offline payment through bank account in any Bank with his/her tender/quotation as per Memorandum No. 3975-F(Y) dated: - 28.07.2016 of Secretary to the Government of West Bengal, Finance Department. The L1 bidder shall make the Formal Agreement after getting the Letter of Acceptance (LOA) issued by the Tender Accepting Authority. Failure to make the Formal Agreement within the time period as prescribed in the Letter of Acceptance (LOA) for the purpose, may be construed as an attempt to disturb the tendering process and will be dealt with accordingly in a legal manner as deemed fit including blacklisting the bidder.

1.2 Security Deposit - While making any payment to the person(s) whose tender has been accepted (hereinafter shall be called the contractor) for work done under the contract, the authority making payment shall deduct such sum which together with the Earnest Money already deposited and converted into security deposit, shall amount to 10% of the value of works executed at the material point of time and paid during the progressive running accounts bills, so that total deduction together with

Earnest Money constitute 10% of the tendered value of work actually done.

In case of excess/and supplementary work over the tendered amount, additional security @ of 10% of such additional amount is to be deposited for all such excess/ and supplementary works beyond the tendered amount before payment of final bill.

Compensation of all other sums of money payable by the contractor to the Government under the terms of the contract may be deducted from the security deposit.

However, even though the earnest money deposited exceeds the prescribed percentage, due to reduction of tendered amount due to any reason whatsoever, such additional earnest money shall be deemed to have been converted into security and further deductions from progressive bills shall be made, taking into consideration the enhanced component of earnest money so converted into security.

Security deduction will not normally be required for hiring of inspection vehicles and boats etc., supply of tools & plants, furniture and computer peripherals. Separate agreement may be required in those cases, particularly for consultancy and RFP for EPC, which shall be made in standard formats to be approved by the Government.

After completion of the work, the Contractor may opt for refund of the Security Deposit by replacing equal amount of Bank Guarantee of scheduled Bank valid up to 3 months beyond the defect liability period.

Additional Performance Security @ 10% of the tendered amount in the form of Bank Guarantee from a Scheduled Bank, valid up to the date of completion of work, shall be obtained from the successful bidder, if the accepted bid value is 80% or less than the estimated amount put to tender.

If the bidder fails to submit Additional Performance Security within 7 (seven) working days from the date of LoA or the time period as approved by the Tender inviting Authority, his Earnest Money will be forfeited.

If the bidder fails to complete the works successfully, the Additional Performance Security along with Security Deposit lying with the Government shall be forfeited at any time during the pendency of contract period as per relevant Clauses of the Contract.

Necessary provisions regarding deductions of Security Deposit from the progressive bills of the Contractor as per relevant clauses of the contract will in no way be affected/ altered by this Additional Performance Security.

Compensation for delay

Clause 2. 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 order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence. Time being deemed to be the essence of the contract on the part of the contractor, the contractor shall be bound in all cases, to achieve the 'Milestones' as defined under Clause 5 and specified in the NIT into various 'Identifiable and quantifiable construction related stages' pertaining to the work. In the event of the contractor failing to comply with any of the conditions related to achieving the 'Milestones' within the specified time period prescribed for such 'Milestone' plus one month, he/she shall be liable to pay compensation.

If the contractor fails to commence and/or maintain required progress viz. Milestones defined in the Notice Inviting Tender over the total time allotted for its full completion and in terms of clause 5 or fails to complete the work and clear the site on or before the end of contract period or extended date of completion, he/she shall, without prejudice to any other right or remedy available under the law on account of such breach, pay as agreed compensation to the implementing Department.

This will also apply to items or group of items for which a separate period of completion has been specified.

Compensation for delay of work: @ 2% (Two percent) of the tendered value of work arrived for each month of delay to be computed on per day basis subject to the ceiling limit of security deposit already withheld or due to be withheld during imposition of the said clause and minimum payable compensation equivalent to the Earnest Money deposited (EMD).

Provided always, that the total amount of compensation for delay, to be paid under this clause shall not exceed 10% of the tendered value of work or the tendered value of the item or group of items of the work, for which a separate period of completion is originally given.

Action when whole of security deposit is forfeited

The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this contract, if the contractor catches up with the progress of work subsequently, part or full of the desired progress as per the contract in accordance with the decision of the Tender Accepting Authority, under powers delegated by Government to be communicated by the Engineer-in-Charge, the withheld amount shall be released. However, no interest, whatsoever, shall be payable on such withheld amount.

Force majeure :-If the work(s) be delayed for the following reasons:-
Due to war, internal emergency and other conditions such as abnormally bad weather, flood, cyclone natural calamity or serious loss or damage by fire or civil commotion, the contractor shall immediately give notice thereof in writing to the Engineer-in-charge but shall nevertheless use constantly his/her best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-charge to proceed with the works.

Contractor remains liable to pay compensation, if action is not taken under Clause 3

Clause 3. Subject to other provisions contained in this clause, the Engineer-in-charge with the prior approval of Tender Accepting Authority, may, without prejudice to his/her any other rights, remedy against the Contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provision of the contract or otherwise, and whether the date of completion has or has not been elapsed, by notice in writing, absolutely determine the contract in any of the following cases:

(i) If the Contractor has been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that work is being performed in an inefficient or otherwise improper or un-workman like manner, shall omit to comply with the requirements of such notice for a period of seven days thereafter;

(ii) If the Contractor has without reasonable cause suspended the progress of work, or has failed to proceed with the work with due diligence so that, in the opinion of the Engineer-in-Charge he/she will be unable to secure completion of the work by the schedule date for completion, and continues to do so after a notice of seven days in writing from the Engineer-in-charge;

(iii) If the Contractor fails to complete the work within the stipulated date or the Milestones/items of work within individual dates of completion, if any, stipulated on or before such date(s) of completion and does not complete them or reach the defined Milestones within the period specified in the notice given in writing to that effect by the Engineer-in-charge;

(iv) If the Contractor persistently neglects to carry out his/her obligations under the contract and/or commits default by not complying with any of the terms & conditions of the contract and does not remedy it, or take effective steps to remedy it, within seven days after a notice in writing is given to him/her to that effect by the Engineer-in-Charge;

(v) If the Contractor being an individual, or a firm, or any partner thereof, shall at any time be adjudged insolvent or have a 'Receiving Order' or Order for administration of his/her Estate made against him/her, or take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force, or make any conveyance or assignment of his/her effects or composition or arrangement for the benefit of his/her creditor or purport to do so, or if any application be made under Insolvency Act for the time being in force for the sequestration of his/her Estate, or if a trust deed is executed by him/her for benefit of his/her creditors;

(vi) If the Contractor being a Company pass a resolution or the court delivers an order of judgement that the Company shall be wound up, or if a receiver or a manager on behalf of a creditor be appointed, or if a circumstance arise which entitle the Court or the creditor to appoint a receiver or a manager or which entitle the court to issue a winding up order;

(vii) If the Contractor shall suffer an execution order being levied on his/her goods and allows it to be continued for a period of 21 days;

(viii) If the Contractor assigns without prior written approval of the Tender Accepting

Authority, transfers, sublets (engagement of labour on piece work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire work or any portion thereof without prior written approval of the Engineer–in–charge;

(ix) AND THEREFORE, the Contractor has made himself/herself liable for action under any of the cases aforesaid, the Engineer-in-charge on behalf of the Government with the prior approval of Tender Accepting Authority, shall have the powers to adopt any of the following actions, as he/she may deem best suited to the interest of the Government:-

(a) To determine the contract as aforesaid, of which rescission notice in writing and costs to be recovered for works since executed subject to a minimum of the amount of Earnest Money deposited by the Contractor under the hand of Engineer-in-charge, shall be the conclusive evidence. Upon such determination, the Earnest Money Deposit, Security Deposit already recovered for executed works and performance guarantee, if any under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.

(b) After giving notice to the Contractor to measure up the work executed and to take such whole or the balance or part thereof, as shall be un-executed out of his/her hands, and to give it to another Contractor to complete the balance work. The Contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

(c) To employ labour paid by the implementing Department, and to supply materials, to carry out the works or any part of the work, debarring the contractor and debiting the cost of labour and price of materials (of the amount of which cost and price determined by certificate of the Engineer-in-Charge shall be final and conclusive against the contractor) and crediting him/her with the value of the work done, in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his/her contract; the certificate of the Executive Engineer as to the value of the work done shall be final and conclusive against the contractor.

Contractors remains liable to pay compensation if action not taken under Clause 3

In the event of above course being adopted by the Engineer-in-charge, the Contractor shall have no claim of compensation for any loss sustained by him/her by reason of his/her having purchased or procured any material or entered into any engagement or made any advances on any account or with a view to execute the work or the performance of the contract. In case, action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof actually performed under this contract, unless and until the Engineer-in-charge has certified in writing that the performance of such work and value payable in respect thereof, and he/she shall only be entitled to be paid the value so certified.

Clause 3A. In case, the work cannot be started due to reasons not within the control of the Contractor within 1/4th (one fourth) of the stipulated time for completion of the work or 45 days whichever is less, which is accepted as a valid & justified reason by the Tender Accepting Authority, either party viz. Contractor & the Engineer-in-Charge may close the contract with the approval of Tender Accepting Authority. In such an eventuality, the earnest money deposited and the security of the contractor shall be refunded, but no payment on account of interests, loss of profit or damages etc. shall be payable at all.

Clause 3B. In case a continuing work cannot be completed due to reasons beyond the control of the contractor, like Force Majeure enumerated later under Clause 5, the contract may be terminated as stated in clause 3A above by the Engineer-in-Charge with the consent of the contractor and approval of the Tender Accepting Authority.

Power to take possession of or require removal of or sell Contractor's plant

Clause 4. In cases in which any of the powers conferred upon the Engineer-in-Charge under Clause 3 hereof shall have become exercisable and the same had not

been previously exercised, non-exercising thereof shall not constitute as a waiver of any of the conditions hereto, and such powers shall, notwithstanding be exercisable in the event of any future case of default by the contractor, for which by any clause or clauses hereof, he/she is declared liable to pay compensation amounting to whole of his/her security deposit, and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force either of the powers under ix (a) or (c) vested with him/her under the preceding clause, he/she may if he/she so desires, take possession of all or any tools & plant, materials and stores, in or upon the work, or the site thereof, or belonging to the contractor, or procured by him/her and intended to be used for execution of the work, or any part thereof, paying or allowing for the same in account at the contract rates or in case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge whose certificate thereof, shall be final and binding. Otherwise, the Engineer-in-Charge may deliver notice in writing to the contractor or his/her clerk, foreman or other authorized agent, requiring him/her to remove such tools & plant, materials or stores from the premises within a time to be specified in such notice; and in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sale them by public auction or private sale on account of the contractor and at his/her risk, in all respects, and the certificate of the Engineer-in-Charge as to the expense of any such removal, and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Clause 5. The time allowed for execution of a work as specified in the 'Schedule of Work' or in the extended time in accordance with the terms and conditions shall be the essence of the contract. Execution of work shall commence from such time period as mentioned in the said schedule, or from the date of handing over of the site to the contractor whichever is later. If the contractor commits default in commencing execution of the work as aforesaid within thirty days, without justifiable reasons included under Force Majeure or other such reasons beyond the control of the contractor, in which case to be reported within seven days by the contractor, considered valid and cogent by the Engineer-in-Charge, the Engineer-in-Charge shall after passing of thirty days from the date of scheduled commencement of work as per work order, with the prior approval of the Tender Accepting Authority, without prejudice to any other right to remedy available in law, be at liberty to apply clause 2 and subsequently clause 3 of the tender document.

5.1 As soon as possible after the contract is executed, signed and agreed, the contractor shall submit a 'Time and Progress Chart' for each broad activity (Milestone) and get it approved by the Engineer-in-Charge. The chart shall be prepared in direct relation to the time slated in the Notice Inviting Tender (NIT) document, for completion of items or group of items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work. This may be amended, as necessary, by an agreement between the Engineer-in-Charge and the contractor within the limitations of time imposed in the NIT document. Further, to ensure good progress during execution of work, the contractor shall in all cases, in which the time allowed for any work exceeds one month (save and except for special jobs for which a separate programme has been agreed upon) to complete the work as per defined 'Milestones' given in such 'Schedule of Work' defined clearly in the NIT itself into various 'Identifiable and quantifiable construction related stages' related with the type and nature of work, and that the 'total time allowed for completion of work' is to be broken up against achievement of those stages during the construction / progress of work to ensure a periodic monitoring of progress and enable the contractor and the Engineer-in-Charge to take corrective measures from time to time.

5.2 If the work(s) be delayed by:

Force majeure, due to war, internal emergency and other conditions such as abnormally bad weather, flood, cyclone natural calamity or serious loss or damage by fire or civil commotion, strike or lockout affecting procurement of construction materials or any of the trades employed in the work, or any other cause which in the absolute discretion of the Engineer-in-Charge is beyond the contractor's control, then upon happening of any such event causing delay, the

contractor shall immediately give notice in writing to the Engineer-in-Charge but shall nevertheless use constantly his/her best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

5.3 Request for rescheduling of 'Milestones' of various activities and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay in the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 If any such case the Engineer-in-Charge, with the approval of Tender Accepting Authority, may give a fair and reasonable extension of time and reschedule the activity wise 'Milestones' for completion of the work. Such extension shall be communicated to the contractor by the Engineer-in-Charge with the approval of Tender Accepting Authority in writing within maximum 1 (one) month of the date of receipt of such request.

Final Certificate

Clause 6. On completion of work, the contractor shall be furnished with a certificate by the Engineer-in-Charge of such completion, but no such certificate shall be given, nor shall the work be considered to be completed until and unless the contractor shall have removed from the work premises on which the work is executed, all scaffolding, surplus materials and rubbish, and cleaned off the dirt from wood works, doors, windows, floors, or other parts of any building, upon or about which the work is 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 Engineer-in-charge whose measurements shall be binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and cleaning off dirt on or before the date fixed for completion of the work, the Engineer-in-charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish, and dispose of the same as he/she thinks fit, and clean off such dirt as aforesaid; and the contractor shall forthwith be bound to pay the amount of all expense so 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.

Payment on inter- mediate certificates to be regarded as advances

Clause 7. No running account bill payment shall be normally made for works less than 30 (Thirty) percent of Tendered Value or up to Rs 25.00 lakh, whichever is less, till after the whole of the work shall have been completed and certificate of completion given. For works of tendered value above Rs 25.00 lakh, for running account bill payment, the contractor shall on submitting a bill of at least Rs 25.00 lakh there for, be entitled to receive a payment proportionate to the part thereof, approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. But all such intermediate payments shall be regarded as payments by way of advance against the final measured bill payment only and not as payments for work actually done and completed, and shall not preclude the bad, unsound, and imperfect or unskillful work which is to be removed and taken away and reconstructed, or re-erected or to be considered as an admission of the due performance of the contract, or any part thereof, in any respect, or the accruing of any claim, nor shall it conclude, determine or affect in any way the powers of the Engineer-in-charge under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work, otherwise the Engineer-in-charge's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties.

Bills to be submitted monthly

Clause 8. Works bill shall be submitted by the contractor each month, after fulfilling above clause, on or before the date fixed by the Engineer-in-charge, for all works executed during the previous month, and the Engineer-in-charge shall take or cause to 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 fourteen days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a Junior Engineer to measure up the said

work in presence of the contractor, whose countersignature in the measurement book will be sufficient warrant; and the Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

Within 10 (Ten) days of completion of work, the contractor shall give notice of such completion to the Engineer-in-charge and within 14 (Fourteen) days of receipt of such notice, the Engineer-in-charge shall inspect the work, and if there is no defect in the work, he/she shall furnish to the contractor a final certificate of completion. Otherwise, a provisional certificate of physical completion indicating defects (a) to be rectified by the Contractor and/or (b) for which payment will be made at reduced rates, shall be issued. Such reduced rate is to be imposed with the approval of Superintending Engineer concerned.

Clause 8A. When annual repair and maintenance work is carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floors, windows shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case, the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either Departmentally or through any other contractor. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

Clause 8B. The Contractor shall submit completion Plan/Drawing as required in the 'General Specification' for Civil as well as Electrical Works as applicable within 30 days of completion of the work.

Clause 9. The Contractor shall submit all bills in printed forms, as per format prescribed by Government of West Bengal, in the office of the Engineer-in-Charge, and the charges in the bills shall always be entered at the rates specified in tender or in case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at rates thereinafter provided for such work.

Payments of contractor's bills to Banks

Clause 9A (1) Payments due to the contractor may, if so desired by him/her be made to his bank through e-Pradan, details of which has to be directly furnished to the Engineer-in-charge.
While the online receipt given by such Banks shall constitute a full and sufficient discharge/acquittance for the payment, the contractor should wherever possible present his/her bills duly receipted and discharged through his/her Banker/s.

(2) In the case of bills, which the contractor presents for payment direct, and which are not endorsed in favour of the Bank, while efforts will be made to secure payment to the financing Bank, payments made to the contractor should be accepted as full acquittance so far as the Government is concerned. As a part of the arrangement, the financing Bank should give the Government a letter to this effect.

Note 1. The procedure will not affect the usual rights of the Government to deduct from contractor's bill, (whether endorsed in favour of a Bank or not) any sum due to Government of account of penalties, over-payments etc., on this or any other contract with the Governor of the State of West Bengal.

Note 2. Nothing contained herein shall operate to create in favour of the Bank any rights, claims or equities vis-à-vis the Governor.

Stores supplied by Government

Clause 10. If the specification or estimate of the work provides for use of any special description of material to be supplied by the Engineer-in-Charge, (such materials & stores and the prices to be charged there for as hereinafter mentioned being so far as practicable for the convenience of the contractor, but not so as in any way to control the meaning or effect of this contract specified in the schedule or 'Memorandum' hereto annexed), the contractor shall be supplied with such materials and stores as is required from time to time to be used by him/her for the 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 or Memorandum 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 Government 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 Government, and shall not on any account be removed from the site of the work, and shall at all times be open for inspection by the Engineer-in-charge. Any such material unused and in perfectly good condition at the time of the completion or determination of the contract shall be returned to the Engineer-in-charge's store, if by a notice in writing under his/her hand, he/she shall so require; but the contractor shall not be entitled to return any such material unless with such consent, and shall have no claim for compensation on account of any such material so supplied to him/her as aforesaid being unused by him, or for any wastage or damage to any such material.

Work to be executed in accordance with specifications, drawings, orders, etc.

Clause 11. The Contractor shall execute the whole and every part of work in the most substantial and workman like manner, and both, as regards to materials and otherwise, in every respect, in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design and drawings, and instructions in writing relating to the work signed by the Engineer-in-Charge and lodged in his/her office, to which the contractor shall be entitled to have access at such office, or on the site of the work for the purpose of inspection during office hours, and the contractor shall, if he/she so require, be entitled at his/her own expense to make or cause to be made copies of the specifications, and of all such design, drawings and instructions as aforesaid.

Alteration in specification and designs do not invalidate contract

Clause 12. The Engineer-in-Charge shall have powers to make any alteration in, omission from, addition to, or substitution for, the original specifications, drawings, designs and instructions, that may appear to him/her to be necessary or recommended by Superintending Engineer or the Chief Engineer during the progress of work, and the contractor shall be at all times be bound to carry out these works, in accordance to any instructions which may be given to him/her in writing, signed by the Engineer-in-charge, and such alterations, omissions, additions or substitutions, shall not invalidate the contract but shall be deemed to have formed a part of the work included in the original tender and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as a part of the work shall be carried out by the contractor on the same conditions in all respects on which he/she agreed to do the main work, and at the same rates, if any, may be specified in the tender for the main work. Time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original work contract, and the certificate of the Engineer-in-charge shall be conclusive as to such proportion. And, if the altered, additional or substituted work includes any class of work, for which no rate is specified in the contract, then such class of work shall be carried out at the rates entered in the schedule of rates of concerned Works Department applicable in the district, which was in force at the time of acceptance of the contract, minus/plus the percentage which the total tendered amount bears to the estimated cost of the entire work put to tender; and if the altered, additional or substituted work is not entered in the said schedule of rates, payment thereof shall be made by the Engineer-in-charge by determining the rates on analysis worked out from (a) the basic rates of materials and labour provided in the aforesaid schedule of rates, or (b) the current market rates of materials and labour when even basic rates for the work are not available in the schedule. In cases when such rates are determined on analysis by the Engineer-in-charge under (a) above, the stipulated percentage above or below schedule of rates as provided in the contract shall also apply, and in case of rates worked out on analysis under (b) above, payment shall be made at the rates so determined without application of the said stipulated percentage. In the event of any dispute regarding rates determined on analysis for any altered, additional or substituted work under this clause, the decision of the Superintending Engineer shall be final and binding.

Rates for works not in tender BOQ/SoR

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

Clause 13. If at any time after the commencement of the work the Governor shall for any reason whatsoever not require the whole thereof as specified in the tender to be carried out, the Engineer-in-charge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from execution of the work in full, but which he/she did not derive in consequence of the full amount of the work not having been carried out; neither shall he/she have any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated.

Action and compensation payable in case of bad work

Clause 14. If it shall appear to the Engineer-in-charge or his/her subordinate engineer in-charge of the work, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials of any inferior description, or that any materials or articles provided by the Contractor, 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 Engineer-in-charge specifying the work, materials or articles complained of notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and re-construct the work so specified in whole or in part, as the case may require, or as the case may be remove the materials or articles so specified and provide other proper and suitable materials or articles at his/her own proper charge and cost; and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his/her demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate put to tender / on up to date executed work value for every day not exceeding ten days, while his/her failure to do so shall continue and in the case of any such failure, the Engineer-in-charge 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 respects of the contractor.

Work to be open to inspection

Contractor or his/her responsible agent to be present

Clause 15. All work under or in course of execution or executed in pursuance of the contract shall at all times be open to inspection and supervision of the Engineer-in-Charge and all his/her subordinates and also higher Officers / Authority of the Government and the contractor shall at all times during the normal working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his/her subordinates to visit the work site shall have been given to the contractor, either himself/herself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if it had been given to the contractor himself/herself.

Notice to be given before work is covered up

Clause 16. The Contractor shall give, not less than five days notice in writing to the Engineer-in-charge or his/her subordinate in-charge of the work, before covering up or otherwise placing beyond the reach of measurement any work, in order that the same is so covered up or placed beyond the reach of measurement, and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his/her 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 the contractor's expense, or, in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Contractor liable for damage done and for imperfections for 180 days after certificate

Clause 17. If the Contractor or his/her workers or authorized representatives shall break, deface, injure or destroy any part of the structure in which they may be working or any building, road, road curbs, fence, canals, water pipes, cables, drains, electric or telephone posts or wires, trees, grass or grassland or cultivated ground contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work from any cause whatever or any imperfections become apparent in it at any time, whether during its execution or within a period of six months after issuance of a certificate of its completion by the Engineer-in-Charge, the contractor shall make the same good at his/her own expense, or in default, the Engineer-in-Charge may cause the same to be made good by other workers, and deduct the expenses (of which the certificate of the Engineer-in-Charge shall be final and binding) from any sums, whether under the contract or otherwise, that may be then, or at any time thereafter become due to the contractor by the Government or from his/her security deposit, or the proceeds of sale thereof, or of a sufficient portion thereof, and if the cost in the opinion of the Engineer-in-Charge whose opinion shall be final and conclusive against the contractor, making such damage or imperfections good shall exceed the amount of such security deposit and/or such sums, it shall be lawful for the Government to recover the excess costs from the contractor in accordance with the procedure prescribed by any law for the time being in force.

Clause 17A. The Contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works, and counting, weighing, assisting in the joint measurement or examination at any time and from time to time of the work or materials. Failing his/her so doing the same may be

provided by the Engineer-in-Charge 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/her Security Deposit or the proceeds of sales thereof or of a sufficient portion thereof. The Contractor shall also provide all necessary fencing / barricading / providing caution boards etc. and light required to protect the public from accident, and shall be bound to bear the expenses of defence 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 damage and costs which may be awarded in such suit, actions or proceedings to any such persons or which may with the consent of the Contractor be paid to compromise any claim by any such persons.

Clause 18A. In every case in which by virtue of the provisions under sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, the implementing Department is obliged to pay compensation to a workman employed by the contractor, in execution of the works. The implementing Department will recover from the Contractor the amount of compensation so paid; and without prejudice to the rights of the Department under sub-section (2) of section 12, of the said Act, implementing Department shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by implementing Department to the Contractor whether under this contract or otherwise. The implementing Department shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his/her giving to the implementing Department full security for all costs for which the Department might become liable in consequence of contesting such claims.

Clause 18B. In every case in which by virtue of the provisions under 'The Contract Labour (Regulation & Abolition) Act 1970', and its amendments and rules, the implementing Department is obliged to pay amount of wages to a workman employed by the Contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by Contractors, executing Department will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the executing Department under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, executing Department shall be at liberty to recover such amount or any part thereof by deducting it form the security deposit or from any sum due by Executing Department to the Contractor whether under this contract or otherwise and the executing Department shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of section 21, of the said Act, except on the written request of the Contactor and upon his/her giving to the implementing Department full security for all costs for which the Department might become liable in contesting such claim.

Clause 19. The Contractor shall obtain a valid license under the Contract Labour (Regulation and Abolition) Act, 1970, before the commencement of the work, and continue to have valid licenses until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986, Fatal Accident Act, 1855, Personal Injuries (Compensation Insurance) Act, 1970.

The Contractor shall also comply with the provisions of the 'Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996' and 'The Building and Other Construction Workers Welfare Cess Act, 1996'. Failure to fulfill these requirements shall attract penal provisions of the contract, arising out of the resultant non-implementation of such provisions.

Labour

Clause 19A. No labour/s below the age of eighteen years shall be employed in the work and the contractor shall abide by the provisions of the Child Labour (Prohibition & Regulation) Act, 1986. Employment of female labour/s in works in the neighborhoods of sensitive barracks should be avoided as far as possible.

Payment of minimum Wages to Labour

Clause 19B. The Contractor shall pay to labours employed by him/her either directly or through Sub-Contractors, wages not less than fair wages as defined by the Labour Commissioner of the State Government under 'Minimum Wages Act, 1948', Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and

Abolition) Act, 1970, wherever applicable.

The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him/her.

In respect of all labourers directly or indirectly employed in the works for performance of the Contractor's part of the contract, the contractor shall comply with or cause to be complied with the contractor's Labour Regulations made by the State Government/ Government of India, from time to time in regard to payment of wages, wage period, deductions from wages, recovery of wages not paid and deductions made without authority, maintenance of wage books or wage slips, publication of scale of wage and other terms of employment, inspection and submission of periodical returns and all other matters likewise in nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, Minimum Wages Act, 1948, wherever applicable.

a) The Engineer-in-Charge concerned shall have the right to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his/her/their wages which are not justified by their terms of the contract or non-observance of the regulations.

b) Under the provision of Weekly Holidays Act, 1986, the contractor is bound to allow to the labours, directly or indirectly employed in the work, one day rest for 6 days of continuous work, and pay wages at the same rate as for duty. In the event of default, the Engineer-in-charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labour and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-charge concerned.

The contractor shall also comply with the provisions of the 'Employees Liability Act, 2008', Workmen's Compensation Act and 'Maternity Benefits Act' or the amendments thereof or any other law relating thereto, and the rules made there under from time to time.

The Contractor shall indemnify and keep indemnified the implementing Department against payments to be made under and for the observance of the laws aforesaid and PW Contractor's Labour Regulations without prejudice to this right to claim indemnity from his/her sub-contractors.

The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

Whatever is the minimum wage for the time being, or if the wage payable is higher than minimum wage, such wage shall be paid by the contractor to the workers directly without the intervention of any Dafadar, and that Dafadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workers as and by way of commission or otherwise.

The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Dafadar from the wage of workers.

Clause 19C. In respect of all labours directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his/her own expenses, arrange for the safety provisions as framed from time to time by the competent authority, and shall at his/her own expense provide all facilities in connection therewith. In case the contractor fails to make arrangement, and fail to provide necessary facilities as aforesaid, he/she shall be liable to pay a penalty of Rs. 2000/- for each default, and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in their behalf, from the contractor.

Clause 19D. For the works above Rs. 2.0 crore, the Contractor shall submit by the 4th and 19th of every month to the Engineer-in-charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively-

The number of labourers employed by him/her on the work, their working hours, and the

wages paid to them;

Accidents that had occurred during the said fortnight showing the circumstances under which it had happened, and the extent of damage and injury caused by them, and the number of female workers who have been allowed maternity benefits according to Clause 19F of the contract and the amount paid to them;

Failing which the contractor shall be liable to pay to the Department, a sum not exceeding Rs. 2000/- for each default or materially incorrect statement. The decision of the Engineer-in-charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and would be binding on the contractor.

Clause 19E. In respect of all labours directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be compiled with all the rules framed by the Government from time to time for the protection of health and sanitary arrangements of workers employed by the contractor.

Clause 19F. In the event of the contractor(s) committing a default or breach of any of the provisions of the Contractor's Labour Regulations and Rules for the protection of health and sanitary arrangement for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and Rules which is materially incorrect, he/she shall, without prejudice to any other liability, pay to the Department a sum not exceeding Rs. 2000/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractors defaulting continuously in this respect, the penalty may be enhanced to Rs. 200/- per day for each day of default subject to a maximum of five per cent of the tendered value. The decision of the Engineer-in-charge shall be final and binding on the parties.

Should it appear to the Engineer-in-charge that the contractor(s) is/are not properly observing and complying to the provisions of the Contractor's Labour Regulations and Rules, The Minimum Wages Act, 1948 and Contract Labour (Regulation and Abolition) Act 1970, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as 'the said Rules') the Engineer-in-charge shall have the power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/or observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-charge shall have the power to provide the amenities herein before mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/her own expense and to approved standards all necessary hutments and sanitary arrangements required for his/her/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-charge shall have power to give notice in writing to the contractor(s) requiring that the said hutments and sanitary arrangements be remodeled and/or reconstruct such hutments and sanitary arrangements according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such hutments and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-charge shall have the power to remodel or reconstruct such hutments and sanitary arrangements according to approved standards at the cost of the contractor(s).

Clause 19G. The contractor shall comply with all the provisions of The Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, Employees Liability Act, Industrial Dispute Act and Maternity Benefit Act, 1961, as amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force by the appropriate authority from time to time.

Clause 19H. The Engineer-in-charge may require the contractor to remove from the site of work, any person or persons engaged/assigned or employed by the contractors upon the work who may be determined as insane or incompetent or misconducts himself/herself, and the contractor shall forthwith comply with such requirements.

Clause 19I. It shall be the responsibility of the contractor to see that the

building/structure under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer-in-charge with vacant possession free from encumbrances in entirety, If such buildings/structures through completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/structure in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay a levy up to 5% of tendered value of work may be imposed by the Engineer-in-charge whose decision shall be final both with regard to the justification and quantum and shall be binding on the contractor.

However, the Engineer-in-charge, through a notice, may require the contractor to remove the illegal occupations, any time on or before construction and delivery.

Work on Sundays

Clause 20. No work shall be done on Sundays without the prior sanction of the Engineer-in-charge.

Work not to be sublet. Contract may be rescinded and security deposit forfeited for subletting, bribing, or if contractor becomes insolvent

Clause 21. The contract shall not be assigned or sublet without specific orders from Government in respect of a specified sub-contractor. And if the contractor shall assign or sublet his contract, or attempt so to do, or become insolvent or commence any in insolvency proceedings 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 servants or agents to any public officer or person in the employ of Government in any way relating to his office of employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Divisional Officer may thereupon by notice in writing rescind the contract, 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 contract had been rescinded under the Clause 3 hereof, and in addition the contractor shall not be entitled to recover or be paid for any work there for actually performed under the contract.

Sum payable as compensation to be considered as reasonable without reference to actual loss

Clause 22. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

Changes in constitution of firm

Clause 23. Where the contractor is a partnership firm or a consortium, prior approval in writing of the Engineer-in-Charge shall be obtained for any change made in the constitution of the firm/consortium. Where the contractor is an individual or a Hindu Undivided Family (HUF) business concern, such approval as aforesaid shall likewise be obtained, before the contractor enters into any partnership agreement/Memorandum of Articles whereunder the partnership firm/ consortium would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract is liable to be rescinded.

Works to be under direction of Engineer-in-Charge

Clause 24. All works to be executed under the contract shall be executed under the direction of Engineer-in-Charge. Further instructions/advices, if felt necessary by Superintending Engineer/ Chief Engineer, shall also be binding to be communicated by the Engineer-in-Charge.

Clause 25. Settlement of Disputes and Arbitration:

Settlement of disputes - Dispute Redressal Committee'

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any way arising out of or relating to the contracts, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the executions or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof shall be dealt with as mentioned hereinafter:

If the contractor considers any work demanded of him/her to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge or any matter in connection with or arising out of the contract or carrying out of the work to be unacceptable, he/she shall promptly within 15 days request the Chairman of the Departmental Dispute Redressal Committee, in writing, for

written instruction or decision. Thereupon, the Dispute Redressal Committee shall give its written instruction or decision within a period of three months from the date of receipt of the Contractor's letter.

The Dispute Redressal Committee in each of the Works Departments shall be constituted with the following officials as Members:

1	Secretary / Engineer-in-Chief of the Department concerned	Chairman
2	Joint Secretary / Deputy Secretary / any Officer of equivalent rank of the Department	Member
3	One Designated Chief Engineer / Engineer of the Department to be nominated by the Department concerned.	Member Secretary and Convenor
4	One representative of Finance Department of the Government not below the rank of Joint Secretary or Financial Advisor in case of the Works Department where FA system has been introduced.	Member

This provisions will be applicable irrespective of the value of the works to which the dispute may relate.

Clause 26. The contractor shall fully indemnify and keep indemnified the implementing Department against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against implementing Department in respect of any such matter as aforesaid, the contractor shall be immediately notified thereof by the implementing Department and the contractor shall be at liberty, at his/ her own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the implementing Department if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge this behalf.

Lump sum as in estimates

Clause 27. When the estimate on which the tender is made includes lump sums in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of works 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 Engineer-in-charge, capable of measurement, certificate in writing of the Engineer-in-charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of this clause.

Action where no specification

Clause 28. In the case of any class of work for which there is no such specifications as referred to under Clause 11, such work shall be carried out in accordance with the latest Bureau of Indian Standards (BIS) specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per reputed manufacturer's specifications if accepted by the Engineer-in-Charge. If not available, then as per State Government / Union Government accepted and approved specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge which is approved by the Tender Accepting Authority.

Definition of works

Clause 29. The expression "works" or "work" where used in these conditions shall, unless there be something either in the subject or context repugnant to such construction, be constructed and taken to mean the works by or by virtue of the contract constructed to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

Clause 30. The Contractor(s) shall at his/their own cost provide his/their labour with hutting on an approved site, and shall make arrangements for conservancy and sanitation in the labour camp to the satisfaction of the local Public Health and Medical Authorities. He/they shall also at his/their own cost make arrangements for the laying

of pipe lines for water supply to his/their labour camp from the existing mains wherever available, and shall pay all fees, charges and expenses in connection with there and incidental thereto.

Clause 31. The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:-

i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-charge;

ii) The Engineer–in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are, in the opinion of the Engineer-in-Charge, unsatisfactory.

Clause 32. The contractor undertakes to make arrangement for the supervision of the work by the firm supplying the construction materials. The Contractor shall collect the total quantity of materials as per approved programme required for the work as per approved programme, before the work is started and shall hypothecate it to the Engineer-in-Charge. If any material remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material returned to the contractor. Although the materials are hypothecated to Institute, the contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the consent of the Engineer-in-Charge in writing.

The contractor shall be responsible for rectifying defects noticed within Defect Liability Period from the date of completion of the work and the portion of the security deposit relating to work shall be refunded after the expiry of Defect Liability Period.

Contractors Superintendence, Supervision, Technical Staff & Employees

Clause 33. The contractor shall provide all necessary superintendence during execution of the work and as long thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(es) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his/her approval or otherwise of such representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative shall be appointed by the contractor soon after receipt of the approval from the Engineer-in-Charge and shall be available at site before start of work.

If the contractor (or any partner in case of firm/company) himself/herself has such qualifications, it will not be necessary for the said contractor to appoint such a principal technical representative but the contractor shall designate and appoint a responsible agent to represent him and to be present at the work whenever the contractor is not in a position to be so present. All the provisions applicable to the principal technical representative under the clause will also be applicable in such a case to the contractor or his responsible agent. The principal technical representative and/or the contractor shall on receiving reasonable notice from the Engineer-in-Charge or his designated representative(s) in charge of the work in writing or in person or otherwise, present himself/herself to the Engineer-in-Charge and/or at the site of work, as required, to take instructions. Instructions given to the principal technical representative or the responsible agent shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and/or the contractor or his/her responsible authorized agent shall be actually available at site especially during important stages of execution of work, during recording of measurement of works and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instructions conveyed by the Engineer-in-Charge or his/her designated representative in the site order

book and shall affix his signature in token of noting down the instructions and in token of acceptance of measurements.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Schedule and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded checked / test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) along with every running account bill / final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The contractor shall provide and employ skilled, semi-skilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who, in his opinion, misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

Clause 34. "Levy / Taxes Payable by Contractor"

(i) GST, Building and other Construction Workers' Welfare Cess or any other tax or Cess in respect of this contract shall be payable by the Contractor and Engineer-in-Charge shall not entertain any claim whatsoever in this respect.

(ii) The contractor shall deposit Government Royalty and obtain necessary permit for supply of the sand, stone chips, red bajri, sand stone, river bed materials etc. from local authorities, if those are directly procured from quarry sites.

In case materials are procured from secondary sources, certificates of quarry owners to the effect of payment of royalties and Cess would have to be furnished. In absence of such certificates towards payment of Royalties and Cess such components shall be deducted from the contractor's bills at prescribed rates and deposited through 'GRIPS' portal or otherwise, in the designated Government Treasuries/PAO.

If pursuant to or under any law, notification or order, any Royalty, Cess or the like becomes payable by the implementing Department and does not at any time become payable by the contractor to the State Government/Local appropriate authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Department and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

Clause 35.

(i) All tendered rates shall be inclusive of statutory taxes and levies payable under respective statutes. However, if any further tax or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid. Provided such payments, if any, is not, in the opinion of the Engineer-in-charge (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.

(ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Department and/or the Engineer-in-Charge

and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.

(iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

Clause 36. Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-charge shall have the option of terminating the contract without compensation to the contractor, but would be liable to clear full dues and claims on work done to his/her legal successor/s.

Clause 37. The contractor shall not be permitted to tender for works in which his near relative is posted as in any capacity between the grades of the Executive Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him/her in any capacity or are subsequently employed by him/her and who are near relatives to any Official in the Institute. Any breach of this condition by the contractor would render him/her liable to be removed from the approved list of contractors of the Department. If however the contractor is registered in any other Department, he/she shall be debarred from tendering in the Department for any breach of this condition.

NOTE: By the term "near relatives" is meant wife, husband, own parents and grandparents, own children and grandchildren, own brothers and sisters, own uncles, aunts and first cousins and their corresponding in-laws.

Clause 38. No engineer of Gazetted Rank or other Gazetted Officer employed in engineering or administrative duties in the Government shall work as a contractor or employee of a contractor for a period of one year after his/her retirement from Government service without the previous permission of Government in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

Clause 39. The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him/her to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer-in-Charge concerned. The contractor shall be paid for the damages/destruction suffered and for the restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the Air Force Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

In the event of the contractor having to carry out reconstruction as aforesaid, he/she shall be allowed such extension of time for its completion as is considered reasonable by the Engineer-in-charge.

Clause 40. The contractor shall comply with the provisions of the Apprentices Act, 1961 and the Apprenticeship Rules, 1992 and orders issued thereunder from time to time. If

he/she fails to do so, his/her failure will be a breach of the contract and the Engineer-in-Charge may, in his/her discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him/her of the provisions of the said Act.

Clause 41. Procedure For Suspension and Debarment of Supplier, Contractors and Consultants

The procedure as laid down below shall govern the suspension/debarment of Suppliers/Contractors/Consultants (Contractors for brevity) involved in Government procurement for offences or violations committed during competitive bidding and contract implementation, for the works under different Departments of Government of West Bengal.

Grounds for Suspension and Debarment:-

(1) Submission of eligibility requirements containing false information or falsified documents.

(2) Submission of Bids that contain false information or falsified documents, or the concealment of such information in the Bids in order to influence the outcome of eligibility screening or any other stage of the bidding process.

(3) Unauthorized use of one's name/digital signature certificate for the purpose of bidding process.

(4) Any documented unsolicited attempt by a bidder **(A Person/Contractor/Agency /Joint Venture/Consortium/Corporation participating in the procurement process and/or a person / Contractor / Agency / Joint Venture / Consortium / Corporation having an agreement/contract for any procurement with the department shall be referred as Bidder)** unduly influencing the outcome of the bidding in his favour.

(5) Refusal or failure to post a self–declaration to the effect of any previous debarment imposed by any other department of State Government and/or Central Government.

(6) All other acts that tend to defeat the purpose of the competitive bidding such as lodging false complain about any Bidder, lodging false complain about any Officer duly authorized by the Department, restraining any interested bidder to participate in the bidding process, etc.

(7) Assignment and subcontracting of the contract or any part thereof without prior written approval of the procuring entity.

(8) Whenever adverse reports related to adverse performance, misbehaviour, direct or indirect involvement in threatening, making false complaints etc. damaging the reputation of the department or any other type complaint considered fit by the competent authority of the department, are received from more than one Officer or on more than one occasion from individual Officer.

(9) Refusal or failure to post the required performance security / earnest money within the prescribed time without justifiable cause.

(10) Failure in deployment of Technical Personnel, Engineers and/or Work Supervisor having requisite license / supervisor certificate of competency as specified in the contract.

(11) Refusal to accept an award after issuance of "Letter of Acceptance" or enter into contract with the Government without justifiable cause.

(12) Failure of the Contractor, due solely to his fault or negligence, to mobilize and start work or performance within the specified period as mentioned in the "Letter of Acceptance", "Letter of Acceptance cum Work Order", "Work Order", "Notice to Proceed", "Award of Contract", etc.

(13) Failure by the Contractor to fully and faithfully comply with its contractual obligations without valid cause, or failure by the Contractor to comply with any written lawful instruction of the Procuring Entity/Authority (the Officer authorized by the Administrative Department, Government of West Bengal for procurement) or its representative(s) pursuant to the implementation of the Contract.

(14) For the procurement of Consultancy Service/Contracts, poor performance by the Consultant of his services arising from his fault or negligence. Any of the following acts by the Consultant shall be construed as poor performance.

(i) Non deployment of competent technical personnel, competent Engineers and/or work supervisors;

(ii) Non-deployment of committed equipment, facilities, support staff and manpower;

(iii) Defective design resulting in substantial corrective works in design and/or construction;

(iv) Failure to deliver critical outputs due to consultant's fault or negligence;
(v) Specifying materials which are inappropriate and substandard or way above acceptable standards leading to high procurement cost;
(vi) Allowing defective workmanship or works by the Contractor being supervised by the Consultant.

(15) For the procurement of goods, unsatisfactory progress in the delivery of the goods by the manufacturer, supplier, or distributor arising from his fault or negligence and/or unsatisfactory or inferior quality of goods, vis-à-vis as laid down in the contract.

(16) Willful or deliberate abandonment or non-performance of the project or Contract by the Contractor resulting in substantial breach thereof without lawful and/or just cause.

CATEGORY OF OFFENCE :-

(A) First degree of offence: 1 to 16 of the above Clause-41 to be considered as First degree of offence.

(B) Second degree of offence: Any one of the offences as mentioned under 'A' above, committed by a particular Bidder/Contractor/Supplier on more than one occasion, be considered as Second degree of offence.

In addition to the penalty of suspension/debarment, the bid security / earnest money posted by the concerned Bidder or prospective Bidder shall also be forfeited.

PENALTY FOR OFFENCE :-

(I) For committing First degree of offence: Disqualifying a Bidder from participating in any procurement process under the Administrative Department of Government of West Bengal up to 2 (two) years.

(II) For committing Second degree of offence: Disqualifying a Bidder from participating in any procurement process under the Administrative Department of Government of West Bengal up to 3 (three) years.

PROCEDURE OF SUSPENSION AND DEBARMENT DURING THE PROCUREMENT PROCESS

(1) Initiation of Action, Notification and Hearings:
Any Bidder or procurement authority on his own or based on any other information made available to him may invite the process of suspension/debarment proceedings by filing a written application with the **Bid Evaluation Committee** and such filing of written application has to be done within forty eight hours from the date and time of publication of the result of technical evaluation of any bid.

(a) Upon verification of the existence of grounds for suspension/debarment, the Chairperson of **Bid Evaluation Committee** shall immediately notify the bidder concerned either electronically through his registered e-mail or in writing to his postal address, advising him that:
i) A complaint has been filed against him and prima facie material has been found, which may lead to suspension/debarment.
ii) He has been recommended to be placed under suspension/debarment by the suspension committee (as constituted by the respective Administrative Department) stating the ground for such.
iii) The said bidder, within three days from the date of issue of such notification by the Bid Evaluation Committee, may approach the Chairperson of Suspension Committee by submitting all required documents in his favour for hearing. Any application made thereafter would not be entertained.

Such notice should contain the e-mail id and the postal address of the Chairperson of the Suspension Committee.

(b) After receiving the recommendation for suspension from Bid Evaluation Committee, Suspension Committee shall issue a notice to the alleged bidder electronically through his registered e-mail id, to submit all relevant documents in support of his defense within three working days after issuance of the notice of the Suspension Committee. The Suspension Committee will conduct the hearing within seven working days from the date of receipt of the documents from the alleged bidder. If no appeal has been received from the alleged bidder or if after hearing sufficient ground for suspension is found, the Suspension Committee, will suspend the alleged bidder from participating in the procurement process under the Administrative Department for a period of six months from the date of issuance of suspension order. The Chairperson of the

Suspension Committee shall issue the suspension order within seven days from the last date of hearing and shall notify the bidder concerned either electronically through his registered e-mail id or in writing to his postal address. The Chairperson of Suspension Committee shall also inform the decision to all concerned.

If sufficient reason for suspension is not found, the Suspension Committee would reject the recommendation of Bid Evaluation Committee and would allow the bidder to take part in the tendering process.

If the bidder is suspended, the Suspension Committee would recommend debarment of the bidder and forward the case with all documents to the Debarment Committee for further action.

(c) The Debarment Committee upon receipt of the recommendation of the Suspension Committee shall scrutinize the documents. The Debarment Committee will hold a hearing of the alleged bidder and issue necessary order within ten working days from the last date of hearing. The Debarment Committee, if satisfied after hearing, shall forward the case to the Department for orders of Debarment. The Department in due course will issue Debarment Order disqualifying/prohibiting the erring bidder from participating in the bidding/procurement of all projects under the Administrative Department for a specified period. The alleged bidder shall be intimated accordingly either electronically through his registered e-mail id or in writing to his postal address. Otherwise the Debarment Committee may reject the recommendation of the Suspension Committee. The Chairperson of Debarment Committee shall also inform the decision to all concerned.

PROCEDURE FOR DEBARMENT DURING THE CONTRACT IMPLEMENTATION STAGE:-

(A) Upon termination of contract due to default of the Bidder, the Engineer-in-Charge shall recommend for debarment to the Bid Evaluation Committee. The Bid Evaluation Committee shall submit his recommendation of debarment of the alleged Bidder along with a detailed report stating clearly the reasons for debarment to the Debarment Committee within 30 (thirty) days from the date of termination of contract. The alleged Bidder shall be intimated accordingly either electronically to his registered e-mail id or in writing to his postal address. The Chairperson of Bid Evaluation Committee shall also inform the decision to all concerned.

(B) The Debarment Committee upon receipt of the recommendation of Bid Evaluation Committee shall scrutinize the documents. The Debarment Committee will hold a hearing about the matter from the Bidder and issue necessary order within 10 (ten) working days from the last date of hearing. The Debarment Committee, if satisfied after hearing, shall forward the case to the Department for the order of debarment. The Department in due course will issue debarment order disqualifying/prohibiting the erring Bidder from participating in the bidding/procurement of all projects under the Administrative Department, Government of West Bengal for a specified period. The alleged Bidder shall be intimated accordingly either electronically to his registered e-mail id or in writing to his postal address. Otherwise the Debarment Committee may reject the recommendation of the Bid Evaluation Committee. The Chairperson of Debarment Committee shall also inform the decision to all concerned.

STATUS OF SUSPENDED / DEBARRED BIDDER :-

(a) Bidder placed under Suspension/Debarment by the competent authority will not be allowed to participate in any procurement process under the Administrative Department within the period of suspension/debarment. The earnest money of the suspended Bidder shall stand forfeited to the Government.

(b) If the Suspension/Debarment Order is issued prior to the date of issue of "Letter of Acceptance", "Letter of Acceptance cum Work Order", "Work Order", "Notice to Proceed", "Award of Contract" etc. for any Bid, the Suspended/Debarred Bidder shall not be qualified for Award for the said Bid and such Procurement Process will be dealt with as per existing norms by simply excluding the erring Bidder.

(c) If the Suspension/Debarment Order is issued after award of a Government Project/Contract to the Debarred Bidder, the awarded Project/Contract shall not be prejudiced by the said Order provided that the said offence(s) committed by the Debarred Bidder is not connected with the awarded project/contract.

Clause 42. Executive Engineer of the concerned Division will be the Engineer-in-Charge in respect of the Tender contract and all correspondences concerning rates, claims, change

in specifications and/or design and similar important matters will be valid only if accepted/recommended by the Engineer-in-Charge. If any correspondence of above tender is made with Officers other than the Engineer-in-charge for speedy execution of works, the same will not be valid unless copies are sent to the Engineer-in-Charge and also approved by him. Instructions given by the Assistant Engineer and the Junior Engineer on behalf of the Engineer-in-Charge (who have been authorized to carry out the work on behalf of the Engineer-in-Charge) regarding specification, supervision, approval of materials and workmanship shall also be valid. In case of dispute relating to specification and work, the decision of Engineer-in-Charge shall be final and binding. The Engineer-in-Charge will however invariably take decisions relating to tender contract or as mentioned in the relevant rules and clauses of the contract document with the approval of the Tender Accepting Authority.

Clause 43. Acceptance of the Tender will rest with the Tender Accepting Authority without assigning reason thereof to the bidder. The accepting authority reserves the right to reject any or all of the tenders without assigning any reason thereof to the bidder/contractor.

Clause 44. In the event of acceptance of Lowest Rate, no multiple Lowest Rates will be considered for acceptance by the Department. In such cases, the Tender will be cancelled.

Clause 45. In the event of conflicting different clauses, the clauses in the e-NIT will prevail.

Clause 46. Engineer-in-Charge shall not entertain any claim whatsoever from the Contractor for payment of compensation on account of idle labour on such grounds including non-possession of encumbrance free land.

Clause 47. Engineer-in-Charge shall not be held liable for any compensation due to machines becoming idle or any circumstances including untimely rains, other natural calamities, like strikes etc.

Clause 48. Imposition of any Duty/Tax/Octroi/Royalty etc. whatsoever of its nature (after work order / commencement and before final completion of the work) is to be borne by the contractor/bidder. Original challan of those materials, which are procured by the bidder, may be asked to be submitted for verification.

Clause 49. Cess @ 1% or as amended time to time of the cost of construction works shall be deducted from the Gross value of all Works Bill in terms of Finance Department order. Also it is instructed to register his/her establishment under the Act, with the competent registering Authority, i.e. Assistant Labour Commissioner / Deputy Labour Commissioner of the region.

Clause 50. No Mobilization/Secured Advance will be allowed unless specified otherwise in the contract.

Clause 51. Valid PAN issued by the Income Tax Department, Government of India, valid 15 digit Goods and Services Tax Payer Identification Number (GSTIN) under GST Act 2017, Cess, Royalty of Sand, Stone Chips, Stone Metal Gravel, Boulders, Forest product etc., Toll Tax, Income Tax, Ferry Charges and other Local Taxes, if any, are to be paid by the Contractor/Bidder. No extra payment will be made as a reimbursement or as compensation for these. The rates of supply and finished work items are inclusive of these taxes and charges.

Clause 52. All working Tools & Plants, Scaffolding, Construction of Vats & Platforms and arrangement of Labour Camps will have to be arranged by the Contractor at his/her own cost.

Clause 53. The Contractor shall supply Mazdoors, Bamboos, Ropes, Pegs, Flags etc. for laying out the work and for taking and checking measurements for which no extra payment will be made.

Clause 54. The Contractor/Bidder should see the site of works and Tender Documents, Drawings etc. before submitting e-Tender and satisfy himself/herself regarding the condition and nature of works and ascertain difficulties that might be encountered in executing the work, carrying materials to the site of work, availability of drinking water and

other human requirements & security etc. Work on river banks may be interrupted due to a number of unforeseen reasons e.g. sudden rises in water levels, inundation during flood, inaccessibility of working site for carriage of materials. Engineer-in Charge may order the contractor to suspend work that may be subjected to damage by climate conditions. No claim will be entertained on this account. There may be variation in alignment, height of embankment or depth of cutting, location of revetment, structures etc. due to change of topography, river condition and local requirements etc. between the preparation and execution of the scheme for which the tendered rate and contract will not stand invalid. The Contractor will not be entitled to any claim or extra rate on any of these accounts.

Clause 55. A machine page numbered Site Order Book (with triplicate copy) will have to be maintained at site by the Contractor and the same has got to be issued from the Engineer-in-Charge before commencement of work. Instructions given by inspecting officers not below the rank of Assistant Engineer will be recorded in this book and the contractor must note down the action to be taken by him in this connection as quickly as possible.

Clause 56. The work will have to be completed within the time mentioned in the e-NIT. A suitable Work Programme based on time allowed for completion of work as per e-NIT is to be submitted by the contractor within 7 (seven) days from the date of receipt of work order which should satisfy the time limit of completion. The contractor should inform in writing, within 7 (seven) days from the date of receipt of work order, the names of his authorized representatives who are to remain present at site daily during work execution who will receive instructions of the work, sign measurement book, bills and other Government papers etc.

Clause 57. No compensation for idle labour, establishment charge or on other reasons such as variation of price indices etc. will be entertained.

Clause 58. All possible precautions should be taken for the safety of the people and work force deployed at worksite as per safety rule in force. Contractor will remain responsible for his labour in respect of his liabilities under the Workmen's Compensation Act etc. He must deal with such cases as promptly as possible. Proper road signs as per PWD practice or any other sign board for safety purpose as per requirement by the concerned Administrative Department will have to be erected by the Contractor at his own cost while operating in public thoroughfares.

Clause 59. The Contractor will have to maintain qualified technical employees and/or Apprentices at site as per prevailing Apprentice Act or as stipulated in the contract.

Clause 60. The Contractor will have to accept the Work Programme as per modifications and priority of work fixed by the Engineer-in-Charge so that most vulnerable reach and/or vulnerable items are completed before impending monsoon or rise in river flood water level or for other suitable reasons.

Clause 61. Quantities of different items of work mentioned in the tender schedule or in work order are only tentative. In actual work, these may vary considerably. Payment will be made on the basis of works actually done in different items and no claim will be entertained for reduction of quantities in some items or for omission of some items. For execution of quantitative excess in any item or supplementary new items of work as decided by the Department, approval of the Superintending Engineer / Chief Engineer / Government would be required, depending on whosoever be the Tender Accepting Authority, before making such payment.

Clause 62. In order to cope up with the present system of e-billing, supply of departmental materials is generally not allowed. However, if in special circumstances, Departmental materials may be issued to the Contractor/Bidder to the extent of requirements as assessed, those may be recovered from the Running Account Bill and/or Final Bill, as applicable.

Clause 63. Any material brought to site by the contractor is subject to approval of the Engineer-in-Charge. The rejected materials must be removed by the contractor from the site at his own cost within 24 hours of issue of the order to that effect. The rates in the schedule are inclusive of cost and carriage of all materials to worksite. The materials will have to be supplied in phase with due intimation to the Assistant Engineer concerned in

conformity with the progress of the work. For special type of materials, i.e. Geo Synthetic Bags, HDPE Bags, Geo Textile Filter, Geo Jute Filter etc., if any, relevant Data Sheet containing the name of the Manufacturers, Test Report etc. will also be submitted on each occasion. Engineer-in-Charge may conduct independent test on the samples drawn randomly before according approval for using the materials at site. In this regard decision of Engineer-in-Charge shall be final and binding.

Clause 64. For all items of contract jobs requiring skilled labour, the contractor shall have to employ 70% (Seventy Percent) of skilled labour locally. In case the Contractor fails to recruit skilled local labour, the Contractor shall employ skilled labour locally secured by Government in the manner indicated above. For bridge works, highly technical works of labour, the contractor may, with the prior permission in writing of the Engineer-in-charge to whom full facts must be placed for such permission, import and employ skilled labour up to 30% (Thirty Percent) of the total requirement. In this case the expression "Imported labour" shall mean "labour imported primarily from other States and secondarily, from the distant districts of the State of West Bengal." In case where the contactor fails to secure unskilled local labour or to engage imported labour, the contractor shall employ labour locally recruited by Government or labour imported by Government at the rate to be decided by the Superintending Engineer of the works concerned, whose decision as to the circumstances in which employment of such labour is of mutual advantage to Government and the contractor, will be final and binding on the parties.

Clause 65. All queries and disputes arising out of the works tender contract is to be brought to the notice of the Chairman of the 'Department Dispute Redressal Committee' in writing for decision within 15 days.

Clause 66. The contractor shall have to make his own arrangements for water, both for the work and use by his workers, etc., for road rollers and for all tools and plant, etc., required on the work.

Clause 67. Contractor will be responsible for the payments of all water charges payable to the Corporation Municipality / Panchayat or any other water works authority including a Government Department concerned.

Clause 68. If the contractors shall desire an extension of the time for completion of the work under clause 5 of the contract, no application for such extension will be entertained if it is not received in sufficient time to allow the Executive Engineer to consider it and the Contractor will be responsible for the consequences arising out of his negligence in this respect.

Clause 69. The Contractor will have to leave ducts in walls and floors to run conduit or cables, where necessary, and he will not be entitled to any extra payment on this account.

Clause 70. Contractors in the course of their work should understand that all materials obtained in the work of Dismantling, Excavation, etc., will be considered Government property and will be disposed of to the best advantage of Government.

Clause 71. In case of very special case of circumstances, if any Departmental materials are issued, there may be delay in obtaining the materials by the Department and the Contractor is, therefore, required to keep himself/herself in touch with the day to day position regarding the supply of materials from the Engineer-in-charge and to so adjust the progress of the work that his 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 claim whatsoever shall be entertained by the Department on account of delay in supplying materials.

Clause 72. No compensation for any damage done by rain or traffic during the execution of the work will be made.

Clause 73. Whenever a work is carried out in municipal area, electric lights or electric danger signals whenever available shall be provided by the contractors on the barriers as well as paraffin lights. Facilities for the electric connection will be made by this Department but the Contractor will bear all the expenses.

Clause 74. The Contractor should quote through rate inclusive of cost of materials and carriage to place of working.

Clause 75. The Contractors should give complete specifications showing the method of execution and the quantity and quality of materials they intend to use per hundred square metre area.

Clause 76. In cases where water is used by the Contractor he will be required to deposit in advance with the Executive Engineer the charges for water which are to be calculated in accordance with the schedule of miscellaneous rates in the Canal Act.

Clause 77. It must be clearly understood by the Contractor that no claim on account of enhanced rates on those already accepted, due to fluctuations arising out of any situation will be entertained during the currency of this contract for the work as per schedule attached to the agreement and the additional work, if any, under Clause 12 of the contract.

Clause 78. In the event of emergency the Contractor will be required to pay his labour everyday and if this is not done, Government shall make the requisite payments as would have been paid by the contractor and recover the cost from the contractors.

INCONVENIENCE OF THE PUBLIC

Clause 79. The Contractor(s) shall not deposit material on any site which will seriously inconvenience the public. The Engineer-in-charge may require the Contractor(s) to remove any materials, which are considered by him to be a danger or inconvenience to the public or cause them to be removed at the contractor's cost.

Clause 80. The Contractor undertakes to have the site clean, free from rubbish to the satisfaction of the Engineer-in-charge. All surplus materials, rubbish etc. will be removed to the places fixed by the Engineer-in-charge and nothing extra will be paid.

Clause 81. The Contractor shall not allow any rubbish or debris to remain on the premises during or after repairs, but shall remove the same and keep the place neat and tidy during the progress of the work. The Engineer-in-charge may get the site premises cleared of debris etc. And recover the cost from the bill of the contractor, if the latter shows slackness in observing this clause.

Clause-82. Construction materials brought at site shall not be stacked at random. The contractor shall stack all these materials as directed by the Engineer-in-charge.

INTERPRETATION OF CLAUSES

Governor means the Governor of the State of West Bengal and his/her successors.

The Government means Government in the concerned Works Department.

The Department means the Secretary of the concerned Department or his/her authorized representative.

The Divisional Officer means the Executive Engineer of the concerned Works Department for the time being of the Division concerned, also identified as the Engineer-in-Charge.

The Sub-divisional Officer means the Assistant Engineer of the concerned Works Department for the time being of the Sub-division concerned. Junior Engineer equivalent to Section Officer of the Section concerned.

Superintending Engineer in the concerned works Department is the final Authority regarding Schedule of Rates and also the acceptance of Non-scheduled item rates arrived on the basis of market rate analysis for supplementary items, and the authority for approval of Reduced Rates and Part Rates. He is also the Tender Accepting Authority for works of value above Rs. 45.00 lakh and up to Rs. 2.00 crore under existing delegated power.

Chief Engineer in the concerned Works Department is the technical head of the Directorate and is also the Tender Accepting Authority for all works of value above Rs.

2.00 crore. Excess work over individual items comprising the original tender may be exceeded beyond 10% with the approval of concerned tender accepting authority and verified by the Superintending Engineer / Chief Engineer subject to the total value of work upon completion is within the technically sanctioned cost and that there is no major deviation from original scope of work in the tender. **Any supplementary tender/item/work in connection with the main tender is to be taken up with the approval of the Tender Accepting Authority not below the rank of Executive Engineer.** Such supplementary tenders above 10% of BOQ are to be executed only with the approval of appropriate Government irrespective of the value of tender.

Words importing the singular number only include the plural number and vice versa.

Irrespective of the accepting authority, Divisional officer shall be the authority signing agreement for all tenders of value more than Rs. 3.00 lakh up to any amount on behalf of the State.

Schedule showing (approximately) materials to be supplied by the Engineer-in-Charge under clause 10:

Particulars	Rates at which the materials will be charged to the contractor			Place of delivery
	Unit	**Rs.**	**P.**	

Note 1- The person or firm submitting the tender should see that the rates in the above schedule are filled up by the Engineer-in-charge on the issue of the form prior to the submission of the tender.

(Name in full)
*Signature of Contractor/Agency with official seal containing Principal office address

(Name in full)
*Signature of Managing Director on behalf of West Bengal Medical Services Corporation Limited with official seal containing designation & address

* To be authenticated on each and every page of the contract document by all parties.

Completion of the unfinished work of Belda Super Speciality Hospital at Belda, Paschim Medinipur (2nd call)

B.O.Q

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Main Building				
1	250 mm th. Autoclave aerated concrete block Work with size 625 mm x 250 mm x 125 mm- Grade-I, having drying Shrinkage less than 0.05% conforming to IS: 2185 (Part-3)-1984 made up of fly ash (conforming to IS: 3812-1981, with permissible loss on ignition upto 6%), lime , cement and laid in Cement Mortar (1:6) complete in all respect as per direction & satisfaction of Engineer -in Charge .				
	In Super Structure, Third Floor.	CUM	4.00	6631.09	26524.38
	In Super Structure, Fourth Floor.	CUM	0.50	6644.67	3322.33
2	100 mm thick Autoclave aerated concrete block Work with size 625 mm x 250 mm x 100 mm- Grade-I, having drying Shrinkage less than 0.05% conforming to IS: 2185 (Part-3)-1984 made up of fly ash (conforming to IS: 3812-1981, with permissible loss on ignition upto 6%), lime , cement and laid in Cement Mortar (1:6) complete in all respect as per direction & satisfaction of Engineer-in-Charge .				
	a) laid in Cement Mortar (1:6) -In Super Structure, Third Floor	Sqm	13.20	714.92	9436.92
	a) laid in Cement Mortar (1:6) -In Super Structure,Roof &Above	Sqm	50.00	743.20	37159.92
3	Screed Concrete of Terrace after Waterproofing.				
	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes.				
	Above 4th Floor Roof (Main Building)	cum	176.00	7714.78	1357801.98
4	Extra rate for adding Polyester Fibre anti shrinkage material @ 0.25% by weight of cement [or as per Manufacturer's Specification] as secondary reinforcement to arrest hair crack in concrete including cost of Fibre .	Kg.	200.00	468.32	93663.36
5	Extra rate for using water proofing and plasticising admixture @ 0.2% by weight of cement (or at manufacturer's specified rate) for concrete of various grades.	Kg.	150.00	134.61	20191.92
6	Above Roof				
	125 mm. thick brick work with 1st class bricks in cement mortar (1:4)				
	ROOF & ABOVE	Sqm.	60.00	866.50	51989.95
7	Water Proofing at Terrace				
	Roof treatment by application of non toxic polyurethane modified acrylic based single component (P U Roof Coat) solvent free, cold applied polyurethane modified elastomeric waterproofing membrane with excellant UV resistant capasity as per ASTM D6083 (a water based 100%acrylic elastomeric emulsion polymer latex coating used as protective coating for roofs) after preparing the surface by cleaning and ti repairing the roof cracks by cement & sand mortar (1:4), preferably with antishrinkage mortar (to be paid separately) if any, apply two coats along with a Primingcoat (two coats of P U Roof Coat and one coat of primer coat compatible with Sqm. i main product as per manufacturers specification) and reinforced with or without 20 gsm GeotextileFleece, including the cost of primer coat and basepreparation, tools & IPlantsbut excluding the cost of scaffolding and stagging complete as per direction of Engineer -in-charge. (Note: If Geotextile Fleece not uesd ,the rate would be reduced by Rs. 5/-per Sqm)				
	At Terrace	Sqm.	1980.00	486.89	964044.39
8	Water Proofing at Lift Pit & OHT				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	(a) Applying 2 coats of bonding agent with synthetic multi functional rubber emulsion having adhesive and water proofing properties by mixing with water in proportion (1 bonding agent : 4 water : 6 cement) as per Manufacturer's specification	Sqm.	385.00	99.55	38325.06
	(b) Applying 2 coats of Non-Toxic Acrylic Polymer modified Paint having adhesive & waterproofing properties by mixing in proportion (1 liquid: 4 cementitious material) or as per manufacturer's specification for water proofing layer in water tank etc.	Sqm.	385.00	290.72	111926.58
9	Labour for Chipping of concrete surface before taking up Plastering work.	Sqm	6837.00	23.76	162414.30
10	INTERNAL PLASTER				
	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor). [Excluding cost of chipping over concrete surface]				
	INTERNAL PLASTER				
	With 1:6 cement mortar :- 15 mm thick plaster				
	In Third Floor	Sqm.	60.50	167.42	10128.76
	In Fourth Floor	Sqm.	275.00	171.94	47284.16
	Above Roof (Stair Room, Over Head Tank,Lift Machine Room & Parapet)	Sqm.	181.50	177.60	32234.11
11	EXTERNAL PLASTER				
	EXTERNAL PLASTER				
	With 1:4 cement mortar : - 20 mm thick plaster				
	Above Roof (Stair Room,Over Head Tank, Lift Machine Room & Parapet)	Sqm.	1045.00	220.58	230510.28
12	Neat Cement Punning (Main Building & Ancillary)				
	Neat cement punning about 1.5mm thick in wall,dado, window sill,floor etc.	Sqm	770.00	38.46	29614.82
13	Flooring Work				
	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by syntheticadhesive & grout materials etc.				
	With Sand Cement Mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m.				
	Floor (Using in Only For Toilet) Area of each tile upto 0.09 Sq.m (Size 300 X 300 mm) Coloured decorative				
	Ground Floor Page no.-64 IT no-35 A.a.(i)	Sqm	21.00	831.43	17460.07
	First Floor	Sqm	35.00	837.09	29298.08
	Second Floor	Sqm	79.00	842.74	66576.78
	Third Floor	Sqm	200.00	848.40	169680.00
	Fourth Floor	Sqm	10.00	854.06	8540.56
14	(D) Wall With Polymerised Adhesive and Epoxy grout pointing including spacer- 2 mm (When Tiles are laid over existing hard ready surface)				
	Area of each tile Above 0.09 Sq.m (Size 300 X 450 mm) (ii) other than Coloured decorative including white				
	Second Floor	Sqm	77.00	1237.53	95290.03
	Third Floor	Sqm	300.00	1243.19	372956.64
	Fourth Floor	Sqm	10.00	1248.84	12488.45

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
15	Supplying, fitting & fixing granite tiles 15mm to 18mm. thick in columns, wall, facia etc. with 15 thick [avg] cement mortar (1:2) including making suitable arrangements to hold the stones properly by brass / copper hooks including pointing in cement mortar (1:2) (1 white cement : 2 marble dust) with admixture of pigment matching the stone shades all complete as per direction of the Engineer-in-charge including cost of all materials, labours, scaffolding, staging ,curing and roughening of concrete surface complete. [Using cement slurry at back side of tiles@ 4.4 kg/sq.m & white cement slurry for joint filling @ 1.8 kg/sq.m] (Area of each Granite slab above 1.0 Square meter.) Add extra for each addl, floor over the rate for item A(33, 34) I) upto 4 th floor- Rs. 12/-per Sq.m				
	Ground Floor	Sqm	231.00	4092.68	945409.45
	Fourth Floor	Sqm.	300.00	4146.98	1244093.76
16	Supplying,fitting & fixing granite slab 15mm to 18mm thick in floor, lobby, stair, landing and treads etc. over 20mm (avg) thick base of cement morter (1:2) laid with white cement slurry @ 4.40Kg per Square meter before placing of granite and jointed with white cement slurry @ 2.0 Kg per square meter with necessary pigments and complete as per direction of Engineer-in-charge including cost of all materials, labours, curing and roughening of concrete surface complete. In ground floor. (Area of each Granite slab above 1.0 Square meter.) Add extra for each addl, floor over the rate for item A(33, 34) I) upto 4 th floor- Rs. 12/-per Sq.m				
	Area of each Granite slab above 1.0 Square meter.				
	Fourth Floor	Sqm.	10.00	3451.29	34512.91
17	18 mm. to 22 mm. thick, kota stone slab set in 20 mm thick (avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade, including grinding & polishing as per direction of Engineer - in - charge to match with the existing work. [Slurry for bedding @ 4.4 kg/Sq.m and pointing @2.0 kg/Sq.m] Add extra for each addl, floor over the rate for item A(33, 34) I) upto 4 th floor- Rs. 13.58/-per Sq.m				
	Ground Floor	Sqm	77.00	1135.72	87450.81
	First Floor	Sqm	183.00	1149.30	210321.75
	Second Floor	Sqm	113.00	1162.87	131404.72
	Third Floor	Sqm	234.00	1176.45	275288.83
	Fourth Floor	Sqm	50.00	1190.02	59501.12
	Above Fourth Floor	Sqm	25.00	1203.60	30089.92
18	Extra cost of labour for prefinished and premoulded Nosing to treads of steps, railing, window sill etc. of Kota Stone/granite	Rmt	3000.00	253.39	760166.40
19	Extra cost of labour for grinding Kota Stone Floor in treads and riser of Steps.	Sqm	666.00	236.42	157456.25
20	Supplying, fitting and fixing 18 mm. to 22 mm. thick kota stone slab in wall, dado in 15 mm thick [avg] cement mortar (1:3) including making suitable arrangement to hold the stone properly by brass / copper hooks including pointing in cement mortar (1:2) (1 cement : 2 marble dust) with admixture of pigments matching the stone shade, including grinding and polishing all complete as per direction of Engineer-in-charge including cost of materials, labour, scaffolding, staging, curing complete. [Using cement slurry for bedding @4.4 kg/Sq.m and for jointing @1.8 kg/Sq.m Add extra for each addl, floor over the rate for item A(33, 34) I) upto 4 th floor- Rs. 13.57/-per Sq.m				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Ground Floor	Sqm	50.00	1292.96	64648.08
	First Floor	Sqm	33.00	1306.54	43115.69
	Second Floor	Sqm	52.00	1320.11	68645.74
	Third Floor	Sqm	130.00	1333.68	173379.02
	Fourth Floor	Sqm	95.60	1347.26	128797.98
	Above Fourth Floor	Sqm	10.00	1360.83	13608.34
21	Supplying and laying true to line and level Double Charge vitrified tiles of approved brand (size not less than 600 mm X 600 mm X 10 mm thick) in floor, skirting etc. set in 20 mm sand cement mortar (1:4) and 2 mm thick cement slurry back side of tiles using cement @ 2.91Kg./sqM or using polymerised adhesive (6 mm thick layer applied directly over finished artificial stone floor/Mosaic etc without any backing course) laid after application slurry using 1.75 Kg of cement per sqM below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles / epoxy grout materials of approved make as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials, labour and all other incidental charges complete true to the manufacturer's Specification and direction of Engineer-in- Charge. (White cement, synthetic adhesive and grout material to be supplied by the contractor)				
	(I) With application slurry @1.75 kg/ Sq.m, 20 mm sand-cement mortar (1:4) & 2 mm thick cement slurry at back side of tiles, 0.2 kg/ Sq.m white cement for joint filling with pigment. (size not less than 600mmX 600 mm X 9.5mm) Add extra for each addl, floor over the rate for Ground Floor (I) upto 4 th floor- Rs. 12/-per Sq.m				
	Ground Floor	Sqm	5.00	1666.26	8331.29
	First Floor	Sqm	10.00	1679.83	16798.32
	Second Floor	Sqm	10.00	1693.41	16934.06
	Third Floor	Sqm	10.00	1706.98	17069.81
	Fourth Floor	Sqm	10.00	1720.56	17205.55
22	Artificial stone in floor, dado, staircase etc with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including raking out joints or roughening of concrete surface and application of cement slurry before flooring works using cement @ 1.75 kg/sq.m all complete including all materials and labour.				
	3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement). Using grey cement				
	35 mm. thick Sq				
	In First Floor	Sqm.	60.50	447.96	27101.29
	In Fourth Floor	Sqm.	20.00	473.16	9463.17
	Over Roof Lift Machine Room Floor	Sqm.	20.00	498.36	9967.23
23	Supplying& laying 20 mm designer chequered tiles of any shade and of approved quality as per IS: 1237: 1980 laid in patterns as directed in pavement, footpath including necessary underlay 25 mm thick average cement mortar (1:3) complete in all respect with all labour and materials [using cement slurry @ 4.4 kg/Sq.m at back side of tiles. Cement of mortar & slurry will be supplied by the Department. Border concrete if necessary to be paid separately].	Sqm	33.00	920.80	30386.29
24	Flush Door				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65mm wide each and the entire frame fitted with 37.5mm wide battens places both ways in order to make the door of solid core and internal lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing shutters in position but excluding the cost of hinges and other fittings in ground floor.				
	(b) 32 mm thick shutters (single leaf)				
	Ground Floor	Sqm.	163.90	2668.50	437367.28
	First Floor	Sqm.	165.00	2684.34	442915.70
	Second Floor	Sqm.	37.40	2700.17	100986.52
	Third Floor	Sqm.	124.30	2716.01	337600.19
	Fourth Floor	Sqm.	10.00	2731.85	27318.48
	Above Roof (Stair Room)	Sqm.	13.75	2752.21	37842.88
25	Fire Door				
	Supplying, fitting & fixing fire resistant Door leaf of 46 mm thick fully flush double skin glazed fire resistant door shutters with or without vision lite, of 120 minutes fire rating conforming to IS:3614 (Part-II), tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100 mm wide, bottom rail 200 mm wide, made out of 18 SWG G.I. sheet (zinc coating not less than 120 gm/ m2) duly filled heat-resistant phenolic resin bonded insulation material (honeycomb craft) and fixing with necessary stainless steel ball bearing hinges of approved make. For pair of doors astragals has to be provided on the meeting stile for both active and inactive leaf. Vision lite wherever applicable should be provided as per manufacturer recommendation with a beeding and screw from inside. The glass should be 6mm clear borosilicate fire rated glass of relevant rating. All door and frames shall be finished with polyurethene aliphatic grade paint of approved colour including applying a coat of approved brand fire resistant primer. The door leaf and frame shall have passed minimum 250 hours of salt spray test. Rate should include supply and installation complete as per direction of Engineer-in-charge				
	i) 2 hour Fire rated door single leaf of size (1200 mm x 2180 mm)				
	Ground Floor	Each	7.00	25478.02	178346.12
	First Floor	Each	5.00	25732.80	128663.99
	Second Floor	Each	5.00	25987.58	129937.89
	Third Floor	Each	5.00	26242.36	131211.79
	Fourth Floor	Each	1.00	26497.14	26497.14
	ii) 2 hour Fire rated door double leaf of size (1500 mm x 2100 mm)				
	Ground Floor	Each	1.00	33887.36	33887.36
	Third Floor	Each	3.00	34666.43	103999.28
	Fourth Floor	Each	1.00	34926.12	34926.12
26	Supplying, fitting & fixing asbestos free composite - 3 criteriafire, heat and smoke check 100 mm thick fire Barrier of customised size & shape to prevent the spread of fire and smoke through vertical service line & utility shaft, having Fire Performance FD120 as per IS:3614 (Part-II) comprising of 4 x 12 mm thick Calcium Silicate boards affixed over internal frame work of 100mmx 50mm chemically treated timber with fire retardant chemicals in vaccum pressure impregnation vessels under 160 PSI pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141 with 50 mm thick infill of ceramic fibre (density 98 Kg/Cum), vermaculite mix, reinforced by TMT 8 mm bars inserted into frame both ways with maximum spacing of 300mm c/c supported within the the existing structure through SS anchore clamp of appropriate size, with spacing 300 mm c/c, with provision of cutouts for service & utility lines as per site condition & filling the space around with fire retardent Polyurethane foam and sealing all the joints with silicon sealant as per direction of Engineer-in-Charge complete in all respect including all incidental charges.	Sqm.	100.00	8935.35	893534.88

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Door Fittings				
27	Supplying, fitting & fixing Surface mounted overhead Door Closer for 2 hour fire rated doors, of size EN-4 for leaf width upto 1100mm weighing maximum 80 kgs, CE certified, marked & conforming to EN 1154-2003 of approved quality of reputed brand, complete as per direction & satisfaction of Engineer-inCharge.				
	for leaf width upto 1100mm	Each	46.00	4807.60	221149.60
28	Supplying, fitting & fixing Stainless Steel 'D' or 'H' type of size 300 mm x 19 mm tubular Handle with Grade 304, CE certified, marked & conforming to EN - 1154, of approved quality of reputed brand as per direction of Eingineer-in-Charge fitted and fixed complete including all incidental charges.	Each	46.00	2096.11	96421.23
29	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark.				
	100mm. X 75mm. X 3.50mm.	Each	1940.00	74.66	144838.85
30	Anodised aluminium Aldrop / Sliding bolts of approved quality manufactured from extruded section conforming to I.S. specification (I.S. 2681/66) fitted and fixed complete.				
	(iii) 300mm x 16mm dia. bolt.	Each	502.00	261.31	131176.21
31	Anodised aluminium barrel / tower / socket bolt (full covered) of approved manufactured from extruded section conforming to I.S. 204/74 fitted and fixed with cadmium plated screws:				
	200mm long x 10mm dia. Bolt. .	Each	671.00	88.23	59204.75
32	Godrej Hydraulic door closer fitted and fixed complete.				
	Medium type	Each	175.00	1883.45	329603.40
33	Anodised aliminium D-type handle of approved quality manufactured from extruded section conforming to I.S. specification (I.S. 230/72) fitted and fixed complete:				
	With continuous plate base (Hexagonal / Round rod)				
	150 mm grip x 10 mm dia rod.c	Each	1342.00	109.73	147252.83
34	Door Stopper (Brass)	Each	671.00	132.35	88807.12
35	Supplying 'Godrej' mortice lock chromium plated with keys 6 levers including fitting & fixing complete.	Each	20.00	2210.36	44207.30
36	FRP Door Shutters				
	Supplying, fitting & fixing fibre reinforced polymer (FRP) Composite door shutters as per approved design with glass fibre reinforced plastic moulded skins and a special sandwich core, so as to impart monolitaheic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS:4020 door testing performance criteria.				
	32 mm thick				
	Ground Floor (I) upto 4 th floor- Rs. 14/-per Sq.m	Sqm.	44.00	3125.51	137522.25
	First Floor	Sqm.	35.00	3141.34	109946.98
	Second Floor	Sqm.	64.00	3157.18	202059.47
	Third Floor	Sqm.	55.00	3173.02	174515.88
	Fourth Floor	Sqm.	10.00	3188.85	31888.53
37	Window Grill				
	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor.				
	Grill weighing above 10 Kg./sq.mtr and up to 16 Kg./sq. mtr.				
	Ground Floor	Qntl.	10.80	11185.31	120801.30
	First Floor	Qntl.	5.20	11267.18	58589.35
	Second Floor	Qntl.	20.00	11349.06	226981.16
	Third Floor	Qntl.	18.00	11430.93	205756.82
	Fourth Floor	Qntl.	20.00	11512.81	230256.21
38	External Painting				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Applying Exterior grade Acrylic primer of approved quality and brand on plastered or cencrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scraping and preparing the surface throughly,complete as per manufacturer's specification and as per direction of the EIC.				
	One Coats				
	Ground Floor	Sqm	1225.00	35.52	43511.61
	First Floor	Sqm	1210.00	36.32	43950.63
	Second Floor	Sqm	1210.00	37.13	44922.44
	Third Floor	Sqm	1210.00	37.93	45894.25
	Fourth Floor	Sqm	1210.00	38.73	46866.07
	Above Roof (Stair Room)	Sqm	303.00	39.54	11979.24
39	Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of Engineer-in-Charge to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer.				
	Two Coat				
	a) Normal Acrylic Emulsion				
	Ground Floor	Sqm	1225.00	75.79	92843.24
	First Floor	Sqm	1210.00	76.59	92678.20
	Second Floor	Sqm	1210.00	77.40	93650.01
	Third Floor	Sqm	1210.00	78.20	94621.83
	Fourth Floor	Sqm	1210.00	79.00	95593.64
	Above Roof (Stair Room)	Sqm	303.00	79.81	24181.27
40	Internal Painting				
	Rendering the Surface of walls and ceiling with White Cement base WATER PROOF wall putty of approved make & brand.(1.5 mm thick)				
	Ground Floor	Sqm	2090.00	138.01	288433.38
	First Floor	Sqm	1729.00	138.82	240021.27
	Second Floor	Sqm	1093.00	139.64	152621.41
	Third Floor	Sqm	1607.00	140.45	225702.82
	Fourth Floor	Sqm	10.00	141.26	1412.64
41	Acrylic Distemper to interior wall, ceiling with a coat of solvent basedinterior grade acrylic primer (as per manufacturer's specification) including cleaning and smoothning of surface. Two Coats				
	Ground Floor	Sqm	7018.00	79.18	555713.31
	First Floor	Sqm	6613.00	79.18	523643.79
	Second Floor	Sqm	5548.00	79.18	439312.83
	Third Floor	Sqm	6602.00	79.18	522772.77
	Fourth Floor	Sqm	10.00	79.18	791.84
	Above Roof (Stair Room)	Sqm	10.00	79.18	791.84
42	(a)Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	sqm.	735.00	32.80	24111.53
	(b) Priming one coat on timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	Sqm.	5500.00	42.99	236420.80
43	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary :				
	(a) On timber or plastered surface :				
	With super gloss (hi-gloss)				
	(iv) Two coats (with any shade except white)	Sqm.	5500.00	91.63	503949.60
	b) On steel or other metal surface : With super gloss (hi-gloss) - iv) Two coats (with any shade except white) Page no.-201 IT no-2.B.(iv)	sqm.	735.00	89.36	65683.13
44	Blood Bank Partition Wall				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Supplying, fitting & fixing of Aluminium fixed partion wall of all aluminium sections viz top, bottom and side member, intermediate member, glazing clip made of Aluminium Alloy Extrusions conforming to IS: 733-1983 and IS: 1285-1975, annodized conforming to IS:1868-1983, fitted with all other accessories viz. EPDM gusket,cleat, angle screws etc. including labour charges for fitting and fixing of aluminium fixed partition wall with glass / panel board all complete as per architectural drawings and direction of Engineer-in-charge. (Excluding cost of glass/ panel board, 10-12 Micron thickness Annodizing film.				
	a) for unsupported length of vertical member upto 1.50m. height of both ends of vertical member restrained but panel with in 0.90 sqm				
	(unit wt of Top, bottom & side member @1.366 kg/m ; intermediate member @ 1.443 kg/m; glazing clip: 0.167 kg/m respectively) [Note : for estimate purpose construction wing may consider weight of Al-Sections for Partition wall @ 5.7 Kg per Sq.M]	Kg.	1045.00	442.30	462202.66
45	Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987				
	6mm thick clear glass.	Sqm	520.00	687.77	357640.19
46	Providing and fixing exterior quality Aluminium Composite Panel (ACP) wall cladding on existing Al. /MS frame work with GI brackets, ACP fixed on the existing frame work by folding the edges of ACP panel (Engraving the rear surface of ACP sheet) with CP angles, cleats and strainless Steel screws forming groves at the periphery of ACP panel. Such grooves filled with foam and silicon sealant etc. complete with all materials (but including the cost of silicon sealant), labour, scaffolding and all other incidental charges complete in all respect as per specification and direction of Engineer-in-charge. (Mode of payment is on finished surface area of ACP)				
	4mm thick (0.50mm Al.+3.0mm LDPE +0.50mm Al. PVDF coating) at Blood Bank.	sqm.	88.00	3255.59	286492.24
47	(a) M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of M.S. stair railing etc. fitted and fixed with necessary screws and lugs in ground floor. (Add extra @ 1% for each addl. floor upto 4th floor and @ 1.25% for each addl. floor above 4th floor) (i) Grill weighing above 10 Kg./sq.mtr and up to 16 Kg./sq. mtr. Page no.-104 IT no-13.a.(i)	Qntl.	100.00	8187.63	818762.56
	All Type of Aluminium Window				
48	Supplying profiles of required section made of Aluminium Alloy Extrusions conforming to IS: 732-1983 and IS: 1285- 1975; Annodized (with required film thickness and specified colour / natural) matt finished conforming to IS: 1868-1983 for fabrication of composit door, sliding & casement windows, partitions, formed of basic sections of any ISI embossed / certified make and brand as per direction of Engineer - InCharge.				
	Natural white				
	a) 2- track sliding window				
	i) Bottom frame	Rmt.	162.00	246.60	39949.46
	ii) Top and side frame.	Rmt.	390.00	220.58	86027.76
	b) 3- track sliding window				
	i) Bottom frame	Rmt.	140.00	246.60	34524.22
	ii) Top and side frame.	Rmt.	390.00	220.58	86027.76
	c) Shutter for all track sliding window.				
	i) Bottom & Top member.	Rmt.	250.00	132.35	33087.60
	ii) Style side member.	Rmt.	240.00	134.61	32307.07
	iii) Interlock member.	Rmt.	230.00	167.42	38506.05
	d) Casement window (40 mm Depth series)				
	i) Outer frame.	Rmt.	681.00	177.60	120944.51
	ii) Mullion.	Rmt.	187.00	251.13	46960.64

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	iii) Shutter.	Rmt.	641.00	174.20	111665.28
	iv) Glazing clip.	Rmt.	2341.00	47.51	111221.85
	v) Cleat angle. (Non-annodized)	Rmt.	2341.00	297.51	696460.61
	e) Fixed glazing.				
	i) Top, bottom and side member.	Rmt.	1500.00	363.12	544672.80
	ii) Mullion.	Rmt.	657.00	383.48	251944.26
	iii) Glazing clip.	Rmt.	7621.00	56.56	431043.76
	f) Louvered window.				
	i) Top, bottom and side member.	Rmt.	179.50	207.01	37158.22
	ii) Louvered Section.	Rmt.	185.50	744.33	138073.14
	iii) Cleat angle (Non-annodized).	Rmt.	890.00	297.51	264779.98
49	Supplying EPDM gusket of approved make and brand as per direction of Engineer in charge.				
	i) For sliding windows				
	a) ' T' shaped EPDM gasket for frames.	Rmt.	521.00	14.71	7661.62
	b) 'U' shaped EPDM gasket for frames.	Rmt.	530.00	16.97	8993.04
	ii) For openable / Casement windows				
	a) EPDM / weather gasket for outer frame and mullion.	Rmt.	3000.00	16.97	50904.00
50	Supplying stainless steel functional hinge for casement window as peapproved brand as directed by Engineer- in -charge. (Natural White)				
	300 mm long	Each	128.00	375.56	48071.48
51	Supplying Zinc powered coated star lock (Natural White)	Each	188.00	45.25	8506.62
52	Supplying Heavy Duty Aluminium Handle (EBCO Type) (Natural White)				
		Each	128.00	108.60	13900.19
53	Labour charge for fabrication and installation of composite door, window, partitions made from annodized extruded alloy aluminium sections for the following units:- (A) Glazed aluminium sliding windows made of extruded and annodized alloy aluminium sectios, fabrications, including cutting to proper shape and size, drilling and aligning of window shutter frame fitted with in built locking arrangements, sliding rollers and other necessary fittings, fixture, adhesives and joineries along with extruded neoprine or EPDM gasketing in between window frame and masonry work (walls, column, beam.lintels etc.) as well as between glass and shutter frame for fixing glass and Polysulphide sealant and in between shutter and window frame where necessary including cutting to requisite size and fixing glass as per drawing, specification and direction of EIC. The rate includes the hire charge of all tools and plants, including all incidental charges, adhesive, joineries such as screw, cleat angle etc. but excluding the cost of extruded aluminium sections, glass, neoprene / EPDM gasket, locking arrangement and rollers.				
	i) 2 track sliding window.				
	Ground Floor	Sqm	6.00	787.32	4723.89
	First Floor	Sqm	3.00	800.89	2402.67
	Second Floor	Sqm	11.10	814.46	9040.55
	Third Floor	Sqm	17.42	828.04	14424.43
	Fourth Floor	Sqm	69.70	841.61	58660.41
	ii) 3 track sliding window.				
	Ground Floor	Sqm	4.00	1064.46	4257.84
	First Floor	Sqm	6.00	1078.03	6468.20
	iii)Openable / Casement window.				
	Ground Floor	Sqm	22.00	1263.55	27798.11
	First Floor	Sqm	14.14	1277.12	18058.54
	Second Floor	Sqm	71.87	1290.70	92762.55
	Third Floor	Sqm	67.72	1304.27	88325.41
	Fourth Floor	Sqm	13.27	1317.85	17487.84
	iv)Fixed glazing.				
	Ground Floor	Sqm	33.56	868.76	29159.11
	First Floor	Sqm	92.94	882.34	82004.31
	Second Floor	Sqm	12.94	895.91	11593.08
	Third Floor	Sqm	12.94	909.48	11768.73
	Fourth Floor	Sqm	93.74	923.06	86527.57

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	v)Louvered window.				
	Ground Floor	Sqm	9.20	825.78	7597.14
	First Floor	Sqm	3.85	839.35	3231.50
	Second Floor	Sqm	6.60	852.92	5629.30
	Third Floor	Sqm	6.60	866.50	5718.89
	Fourth Floor	Sqm	3.85	880.07	3388.28
54	Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987				
	6mm thick clear glass.	Sqm	585.00	687.77	402345.22
55	Filling the gap in between aluminium frame & adjacent RCC / Brick/ Stone work by providing weather silicon sealant over 6mm dia backer rod of approved quality as per architectural drawings and direction of Engineer-in-Charge complete. Upto 5 mm depth and 5 mm width				
	All floor	Mtr.	3850.00	88.29	339917.12
	False Ceiling (Cement Fibre / Mineral Fibre)				
56	Providing and fixing of false ceiling with powder coated exposed G.I. grid suspension system (E-Grid T 2430/1510 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200mm c/c) consisting of Main Runner 3600 mm long, Cross Tee 1200 mm / 600 mm long and Wall Angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200mm will be inserted in the pre-cut slots of Main Runner at regular interval of 600 mm to form a modular grid of 1200mm X 600mm. Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 4 mm thick High Pressure Steam Cured Non Asbestos Fibre Cement Standard Ceiling Board (Density > 1300 Kg/m3) of size 595 mm X 595 mm, conforming IS 14862 & Type B Category III of ISO 8336, tested as per AS-1530 part 3 & BS-476 Part 4,5,6,7 & 8, should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge. In ground floor				
	a) False Ceiling (with 4mm thick Fibre Cement Standard Ceiling Board and EGrid T-2430/1510).				
	Ground Floor	Sqm	1365.00	668.54	912556.01
	First Floor	Sqm	1090.00	668.54	728707.73
	Second Floor	Sqm	570.00	668.54	381067.34
	Third Floor	Sqm	750.00	668.54	501404.40
	Fourth Floor	Sqm	10.00	668.54	6685.39
57	S.S. False Ceiling				
	Providing and laying roof insulation with 40 mm thick impervious sprayed, closed cell free Rigid Polyurethane foam over deck insulation conforming to IS - 12432 Pt. III (density of foam being 40-45 kg/cum), over a coat of polyurethane primer applied @ 6-8 sqm per litre, laying 400 G polythene sheet over PUF spray in panels of 2.5 m x 2.5 m and embedding with 24 G wire netting and sealing the joints with polymerized mastic, all complete as per direction of Engineer-in-Charge.				
	Ground Floor	Sqm	35.00	1084.82	37968.73
58	Expansion Joint				
	Expansion joint in floor roof etc. formed with V strips made of 22.5 cm wide strips of 24 gauge aluminium sheets with anchor arm projecting on each side (and end turned) embedded in adjacent cement concrete, including shaping and finishing the edges on either side of the joint (including the cost of bituminous filler if any) complete as per direction of Engineer-in-Charge.	Mtr.	660.00	415.87	274477.08

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
59	Sealing new expansion joint with Elastomeric Polysulphide Sealant of gap size 50mm X 25mm Including cleaning of the expansion joint thoroughly, mending of edges & surface, placing 50mm dia Backer rod as back up material with the cost of materials, labours, & all other incidental charges as per manufacturer's specification & direction of Engineer-in-charge.	Mtr.	660.00	1013.45	668879.24
60	Supplying & fitting of 55mm thick asbestos free - fire, heat and smoke resistant composite Fire check Door Shutter complying with fire performance-FD120 as per IS:3614 (part -II)-comprising of 2x8 mm Calcium Silicate boards over Chemically treated (with Fire retardant chemicals in pressure impregnation vessels under 160 psi pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141) internal timber (Malaysian Hard Wood, densified to 810 kg/cum) frame work of 100 mm x 32 mm with 32mm thick infill of ceramic fiber (density 128Kg/cum), vermaculite mix faced with 3 mm Fire retardant High Density fire board on outerside & similar one over 3 mm thick protective lead covering conforming to ASTM B749-03 for reducing the radiation level to 2 mrem in 1 hour as stipulated by code of Federal Regulation (CFR), internally lipped with hardwood beading, and pasted in Hydraulic Press under 25 MPa, spray coated with 2 coats of in-tumescent paint of minimum 300 micron, and with single row of Brush- Type intumescent strip of size 10 mm x 4 mm affixed on peripheral slit on all edges of shutter except bottom for fire and smoke sealing, without any external lipping including fitting, fixing shutters in position but excluding the cost of hinges & other fittings as per direction of Engineer-in-Charge complete in all respect in Ground Floor. [Note : Specific permission of the Superintending Engineer is required for execution of this item.]	Sqm.	20.00	18686.29	373725.86
61	Panel shutters of door and window, as per design (each panel consisting of single plank without joint), including fitting and fixing the same in position but excluding the cost of hinge and other fittings. In ground floor.				
	(ii) 40mm thick shutters with 19mm thick panel of size 30 to 45 cm				
	(a) Ordinary Teak Wood.	Sq.m.	10.00	4063.27	40632.70
62	Wood work in door and window frame fitted and fixed in position complete including a protective coat of painting at the contact surface of the frame exluding cost of concrete, Iron Butt Hinges and M.S clamps. (The quantum should be correted upto three decimals).				
	(e) Sal : Malayasian	Cum.	1.00	86079.80	86079.80
63	French polishing to wood work including preparing surface (ordinary gloss)				
	(a) On new wood work	Sqm.	10.00	528.27	5282.70
64	Polyurethane Polishing to woodwork with required colour as approved by Engineer-in-Charge with preparing surface including scaffolding and hire charges of compressor machine including cost of filler and hardener material such as P. U. Sealing, P. U. Top coat (Matt/Glossy), Thinner, Spirit etc. and inclusive of all operation, material and labour complete as per direction of Engineer-in- Charge.	Sqm.	10.00	946.81	9468.14
65	Supply, fitting & fixing of Hermetically Sealed Doors for OT which maximum door weight shoud be 160Kg/Leaf and opening speed should be 25-55 cm/sec and closing speed should be 25-55 cm/sec with all assecories for sliding as per direction of Engineer - in - Charge	Sqm.	6.00		348000.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
66	Supplying and fixing grasses tiles of grass Maxican Carpet/Selection No. 1 Healthy & fresh grasses (size 1'x1' or bigger) including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from wees and fit for mowing including supplying good earth as required by Engineer-in-charge. (Rate includes supply of labour, tools & plants including materials)	Sqm	350.00	227.85	79746.21
67	Collapsible gate with 40mm x 40mm x 6mm Tee as top and bottom guide rail, 20mm x 10mm x 2mm vertical channels 100mm apart in fully stretched position 20mm x 5mm M.S. flats as collapsible bracings properly rivetted and washered including 38mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement concrete and including cutting necessary holes, chasing etc. in walls, floors etc. and making good damages complete.				
	In ground floor.	Sqm.	15.00	3848.34	57725.14
68	White washing including cleaning and smoothening surface thoroughly				
	(a) One coat	Sqm.	550.00	14.81	8145.50
69	Cleaning the concrete surface by removing dirt and debris, marking defective locations and removing loose concrete by careful stripping untill hard surfaceis exposed, cutting the concrete to regular shape, wire brushing the exposed surface and removing debris from site complete as per direction of the Engineer - in - Charge.	Sqm.	200.00	101.81	20361.60
70	Cleaning the exposed reinforcement preferably upto full diameter by wire brush, applying two coats of polymer based rust removing compound left for 24 hours, removing the coating and then applying two (2) coats of polymer modified anti corrosive protective coating formulated to inhibit the corrosion of reinforcement as per manufacturer's specification] [Mode of measurement:The affected surface area of reinforcement shall be considered for payment]	Sqm.	50.00	884.60	44229.92
71	Labour for setting Kota / Dungri stone slabs in cement mortar (1:2) including necessary underlay of mortar (1:2).	Sqm.	50.00	236.42	11821.04
72	Repairing cracks in floor with cement mortar (1:2) with necessary pigment to match with existing works, including prior cutting and cleaning the cracks as directed.	Sqm	500.00	7.78	3891.33
73	Cow dung (green and not dry hard) and cement wash (3 cow dung: 1 cement by wt.) not less than 1.5 mm. thick. (Cement 1.08Kg/Sq.m)	Sqm.	600.00	14.71	8823.36
74	Repairing crack in wall by cement grouting (1 : 2) including widening the crack on the surface (into V section) cleaning and packing the same with cement mortar (1 : 2) and finishing off to match with adjacent surface.	Sqm.	500.00	15.38	7692.16
75	Clearing compound premises of shurbs, plants, jungles etc. by cutting and removing as directed (Specific permission of Engineer-in-Charge prior to execution will be necessary).	Sqm.	2000.00	12.44	24886.40
illary Building					
76	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes. Page no.-26 IT no-10				
	Above Gr. Floor Roof (Ancillary Building)	cum	121.00	7714.78	933488.86

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
77	Supplying & laying 3mm thick pre-fabricated plastomeric water proofing membrane conforming to EN 12311-1 & ASTMD 5147, manufactured with atactic poly propylene (APP) modified premium grade asphalt , specially reinforced with non-woven polyester core with polyester reinforcement @160 gms per sqm & both faces covered with thermo-fusible polyethylene film /MineraL on top face over a coat of primer @ 0.40 lit/sqm of manufacturer's specification on smooth,clean dry surface prepared wherever required.Lap joint shall be provided of 75 mm in longitudinal & 100 mm in transverse direction and fused using LPG/ Propane torch employing extra care ensuring full bondage, complete removal of entrapped air and sealing edges into grooves in appropriate manner as per direction of Engineer -in-charge all complete including materials,labour and applicable taxes. (Payment shall be made on the basis of finished surface area.). Membrane Property: Softening Point > 150 deg C, Cold Flexibility < -6 deg C, Tensile Strength, N/cm : 600 (longitudinal), 450 (transverse), Tearing Strength, N:300 (longitudinal), 200 (transverse)				
	Ancillary Building Roof	Sqm.		460.40	0.00
78	Plastering				
	INTERNAL PLASTER				
	With 1:6 cement mortar :- 15 mm thick plaster				
	Ancillary Building	Sqm.	407.00	151.05	61477.00
79	EXTERNAL PLASTER				
	With 1:4 cement mortar : - 20 mm thick plaster				
	Ancillary Building	Sqm.	475.00	191.17	90807.08
80	Flooring at BMW				
	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by syntheticadhesive & grout materials etc.				
	(D) Wall With Polymerised Adhesive and Epoxy grout pointing including spacer- 2 mm (When Tiles are laid over existing hard ready surface)				
	Bio-Medical-Waste	Sqm	209.00	831.43	173769.29
81	IPS for all				
	Artificial stone in floor, dado, staircase etc with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including raking out joints or roughening of concrete surface and application of cement slurry before flooring works using cement @ 1.75 kg/sq.m all complete including all materials and labour.				
	3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement). Using grey cement				
	35 mm. thick Sq				
	Ground Floor(Ancilliary Building)	Sqm.	550.00	447.96	246375.36
82	Flush Door				
	Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65mm wide each and the entire frame fitted with 37.5mm wide battens places both ways in order to make the door of solid core and internal lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing shutters in position but excluding the cost of hinges and other fittings in ground floor.				
	(b) 32 mm thick shutters (single leaf)				
	Ancillary	Sqm.	275.00	2668.50	733837.72
83	Rolling Shutter				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	(a) Supplying, fitting and fixing steel rolling shutter profile type with18 B.G . of approved type steel latche section 75mm wide, fitted withcoil wire spring to necessiate the fitting of required Nos. of C.I.Pulleys on heavy type solid drawn seamless steel tubecomplete withlocking arrangements both inside and outside specially builtup sidguide channels including providing a hood for the steel rolling shutter in the room, painting two coats ofapproved aluminium paint over a coat of red lead primercomplete. Page no.-106 IT no-19 (a)				
	75x1.25 mm M.S. laths with 1.25 mm thick top cover	Sq.m	32.00	2454.70	78550.53
84	Internal Painting				
	White washing including cleaning and smoothening surface thoroughly. For all floors. (Ancillary Buildings). Three coats (on new works only) Page no.-194 IT no-1.(c)	Sqm	2002.00	22.64	45315.89
85	External Painting				
	Applying Exterior grade Acrylic primer of approved quality and brand on plastered or cencrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scraping and preparing the surface throughly,complete as per manufacturer's specification and as per direction of the EIC.				
	One Coats				
	Ancillary Buildings	Sqm	1579.00	35.52	56085.57
86	Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of Engineer-in-Charge to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer.				
	Two Coat				
	Ancillary Buildings	Sqm	1579.00	75.79	119673.04
87	Aluminium Window				
	Labour charge for fabrication and installation of composite door, window, partitions made from annodized extruded alloy aluminium sections for the following units:- (A) Glazed aluminium sliding windows made of extruded and annodized alloy aluminium sectios, fabrications, including cutting to proper shape and size, drilling and aligning of window shutter frame fitted with in built locking arrangements, sliding rollers and other necessary fittings, fixture, adhesives and joineries along with extruded neoprine or EPDM gasketing in between window frame and masonry work (walls, column, beam.lintels etc.) as well as between glass and shutter frame for fixing glass and Polysulphide sealant and in between shutter and window frame where necessary including cutting to requisite size and fixing glass as per drawing, specification and direction of EIC. The rate includes the hire charge of all tools and plants, including all incidental charges, adhesive, joineries such as screw, cleat angle etc. but excluding the cost of extruded aluminium sections, glass, neoprene / EPDM gasket, locking arrangement and rollers.				
	STP & UGT	Sqm	16.500	787.32	12990.70
	ii) 3 track sliding window.				
	ESS Building	Sqm	9.000	1064.46	9580.13
	v)Louvered window.				
	Ancillary	Sqm	5.000	825.78	4128.88
88	Supplying profiles of required section made of Aluminium Alloy Extrusions conforming to IS: 732-1983 and IS: 1285- 1975; Annodized (with required film thickness and specified colour / natural) matt finished conforming to IS: 1868-1983 for fabrication of composit door, sliding & casement windows, partitions, formed of basic sections of any ISI embossed / certified make and brand as per direction of Engineer - InCharge.				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	I) Natural white				
	a) 2- track sliding window				
	i) Bottom frame	Rmt.	15.00	246.60	3699.02
	ii) Top and side frame.	Rmt.	40.00	220.58	8823.36
	b) 3- track sliding window				
	i) Bottom frame	Rmt.	7.00	246.60	1726.21
	ii) Top and side frame.	Rmt.	15.00	220.58	3308.76
	d) Shutter for all track sliding window.				
	i) Bottom & Top member.	Rmt.	45.00	132.35	5955.77
	ii) Style side member.	Rmt.	35.00	134.61	4711.45
	iii) Interlock member.	Rmt.	42.00	167.42	7031.54
89	(F) Supplying Zinc powered coated star lock (Natural White)	Each	26.00	45.25	1176.45
90	Supplying EPDM gusket of approved make and brand as per direction of Engineer in charge.				
	i) For sliding windows				
	a) ' T' shaped EPDM gasket for frames.	Rmt.	170.00	14.71	2499.95
	b) 'U' shaped EPDM gasket for frames.	Rmt.	350.00	16.97	5938.80
91	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor.				
	Grill weighing above 10 Kg./sq.mtr and up to 16 Kg./sq. mtr.				
	Ground Floor	Qntl.	3.200	11185.31	35792.98
92	(a)Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	sqm.	20.00	32.80	656.10
93	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary :				
	b) On steel or other metal surface : With super gloss (hi-gloss) - iv) Two coats (with any shade except white)	sqm.	20.00	89.36	1787.30
94	(B) Painting with superior quality aluminium paint of approved make and brand including smoothening surface by sand papering etc. on steel surface :				
	(b) Two coats	Sqm.	2233.00	64.48	143980.27
95	Neat cement punning about 1.5mm thick in wall,dado, window sill,floor etc.	Sqm	40.00	43.51	1740.24
96	Brick work with 1st class bricks in cement mortar (1:4)				
	(a) In foundation and plinth	Cum	5.00	6117.53	30587.65
	(b) In superstructure, ground floor	Cum	10.00	6369.79	63697.87
	INTERNAL DRAIN				
97	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m.				
	In ground floor including roof.				
	a) upto 150 mm. Thick	Cum.	60.00	1062.20	63731.81
98	Earth work in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete. Page no.-01 IT no-02.(a & b)				
	a) Depth of excavation not exceeding 1,500 mm.	Cum	286.50	134.92	38654.07
99	Earth work in filling in foundation trenches or plinth with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work)				
	(a) With earth obtained from excavation of foundation.	Cum	100.00	87.71	8771.32

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
100	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m.				
	a) In ground floor including roof.	Cum	60.00	505.65	30338.78
101	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement,if any, in ground floor as per relevant IS codes. a) Pakur Variety	cum	70.50	6386.76	450266.24
102	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes.	cum	11.00	7103.94	78143.30
103	Brick work with 1st class bricks in cement mortar (1:6)				
	In superstructure, ground floor.	cum	82.50	6369.79	525507.44
104	EXTERNAL PLASTER IN DRAIN				
	With 1:4 cement mortar : - 20 mm thick plaster				
	In Ground Floor	Sqm.	825.00	191.17	157717.56
105	Neat cement punning about 1.5mm thick in wall,dado, window sill,floor etc.	Sqm	825.00	43.51	35892.41
	Cable Trench				
106	Earth work in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete.				
	a) Depth of excavation not exceeding 1,500 mm.	Cum	190.00	134.92	25634.46
107	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement,if any, in ground floor as per relevant IS codes. a) Pakur Variety	Cum	12.00	6386.76	76641.06
108	Providing and Laying Reinforced Cement ConcretePipe NP3 as per design in Single Row				
	Providing and laying reinforced cement concrete pipe NP3 with spigot socket for culverts on first class bedding of granular material in single row including fixing with cement mortar 1:2 as per Technical Specification Clause 1106 for Rural Roads of MORD.				
	(F) 600 mm dia	Metre	300.00	432.12	129635.52
	SANITARY & PLUMBING WORK				
109	A) Supplying, fitting and fixing E.W.C. in white glazed vitreous chinaware of approved make complete in position with necessary bolts, nuts etc.				
	(i) With 'P' trap	each	20	1,607.44	32148.70
	(ii) With 'S' trap	each	100	1,710.37	171037.44
	B) Supplying, fitting and fixing Shallow water closet Indian pattern (I.P.W.C.) of approved make in white vitreous chinaware in position (excluding cost of concrete for fixing).				
	(i) 580 mm long	each	35	1,100.66	38523.02
110	Supplying, fitting and fixing 10 litre P.V.C. low-down cistern conforming to I.S. specification with P.V.C. fittings complete,C.I. brackets including two coats of painting to bracket etc.	each	155	1,148.17	177966.04
111	Supplying,fitting and fixing approved brand P.V.C. CONNECTOR white flexible, with both ends coupling with heavy brass C.P. nut, 15 mm dia.				
	(iv) 750 mm long	each	305	132.35	40366.87
112	Supplying, fitting and fixing Closet seat of approved make with lid and C.P. hinges, rubber buffer and brass screws complete.				
	(a) E.W.C.				
	(iv) Bestolite (solid type) white	each	120	808.81	97056.96
	(ii) Plastic (hallow type) white	each	120	429.86	51582.72

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
113	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., one approved quality brass C.P. pillar cock of 15 mm dia., C.P. chain with rubber plug of 30 mm dia., approved quality P.V.C. waste pipe with C.P. nut 32 mm dia., 900 mm long approved quality P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets with two coats of approved paint.				
	(ii) 550 mm X 400 mm size	each	150	2,497.69	374653.44
114	Supplying, fitting and fixing Stainless steel Wall Mounted Grab Bar. Load bearing capacity 150 kg, covered by Nylon surface with contour finish (for better grip) with Anti-bacterial surface complete. (Model Code No. B2210106 of CERA or equivalent.)				
	600mm Long	each	15	2,064.44	30966.60
115	Supplying, fitting and fixing best quality Indian make mirror 5.5 mm thick with silvering as per I.S.I. specifications supported on fibre glass frame of any colour, frame size 550 mm X 400 mm.	each	150	693.43	104013.84
116	Supplying, fitting and fixing liquid soap container.				
	(a) Cromium plated.	each	220	444.56	97803.55
117	Supplying, fitting and fixing bib cock or stop cock.				
	(a) (i) Chromium plated Bib Cock short body (Equivalent to Code No. 511 & Model - Tropical / Sumthing Special of ESSCO or similar brand).	each	10	609.72	6097.17
	(d) (i) Chromium plated Angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand).	each	300	921.93	276578.40
	(ii) Chromium plated concealed Stop Cock heavy duty (Equivalent to Code No. 5083 & Model - Florentine of Jaquar or similar brand).	each	20	762.43	15248.58
	(ii) Chromium plated Bib Cock long body with wall flange with aerator (Equivalent to Code No. 512 & Model - Tropical / Sumthing Special of ESSCO or similar brand)	each	5	745.46	3727.30
118	Supplying, fitting and fixing shower of approved brand and make.			-	0.00
	(f) Hand Shower(Health Faucet) with 1mtr Fexible Tube with Wall Hook(Equivalent to Code No.573 & Model -ALLIED of Jaquar or similar).	each	135	1,415.13	191042.71
	(b) Chromium plated Rose shower with revolving joint and 150 mm long shower arm (Equivalent to Code No. 5489 & Model - Florentine of Jaquar or similar brand).	each	30	1,597.25	47917.63
	(a) (iii) Chromium plated shower arm 240 mm long (Equivalent to Code No. 536(A) & Model - Tropical / Sumthing Special of ESSCO or similar brand).	each	30	349.54	10486.22
119	Supplying, fitting and fixing pillar cock of approved make.				
	a) (i) CP Pillar Cock - 15 mm. (Equivalent to Code No. 507 & Model Tropical/ Sumthing Special of ESSCO or similar brand).	Each	125	627.82	78477.00
	f) (ii) CP 2-way bib Cock - 15 mm, supplied, fitted and fixed. (Code No.5041 & Model - FLORENTINE of JAQUAR or similar brand).	each	125	1,196.81	149601.20
120	Supplying, fitting and fixing towel rail with two brackets.				
	(a) C.P. over brass				
	(ii) 25 mm dia. and 600 mm long	each	200	486.42	97283.20
121	Scrub unit				
A	Supply and installation - SS Scrub made of 18 SWG thk. SS Grade 304 film quoted amtt finish including 2 no. Elbow action wall mixture on scrub with drain out let valve Tap and wall mixture will be Surgical type make (Jaguar wall mounted) including G.I. short pieces for hose tapping etc. all complete as per direction of Engineer - in - Charge.				
	Sizes Dimension - 2000 mm x 600 mm (LxW), 1000 mm height, Vertical depth 450 mm	Each	1	1,04,065.59	104065.59

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
B	Supply and installation - SS Scrub made of 18 SWG thk. SS Grade 304 film quoted amtt finish including 5 no. Elbow action wall mixture on scrub with drain out let valve Tap and wall mixture will be Surgical type make (Jaguar wall mounted) including G.I. short pieces for hose tapping etc. all complete as per direction of Engineer - in - Charge.				
	Sizes Dimension - 3000 mm x 600 mm (LxW), 1000 mm height, Vertical depth 450 mm	Each	1	2,06,479.35	206479.35
122	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete.				
	(i) 635 mm X 395 mm X 420 mm	each	20	3,245.41	64908.26
123	Supplying, fitting and fixing dome shaped C.P. waste grating for urinals.				
	(ii) 50 mm	each	20	287.32	5746.50
124	Supplying, fitting and fixing porcelain partition wall of approved make of size 618 mm X 310 mm complete in all respect.	each	10	1,280.52	12805.18
125	Supplying, fitting and fixing C.P. Extension Pipe	each	36	119.91	4316.66
126	Supplying, fitting and fixing C.P. Wall Flange	each	36	72.40	2606.28
127	Supply of UPVC pipes (B Type) & fittings conforming to IS-13592-1992				
	(A) (i) Single Socketed 3 Meter Length				
	(c) 160 mm	metre	100	1,134.59	113459.36
	(B) Fittings				
	(iii) Door Tee				
	(c) 160 mm	each	50	581.44	29071.84
	x) Bend 87.5º				
	(c) 160 mm	each	50	382.35	19117.28
	xv) Vent Cowl				
	(c) 160 mm	each	50	64.48	3223.92
	xvi) Pipe Clip				
	(c) 160 mm	each	200	48.64	9728.32
128	Labour for fitting and fixing U.P.V.C. pipes for above ground work including cost of jointing materials etc. fitting and fixing all necessary specials, cutting pipes, cutting holes in walls or R.C. floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost and fitting and fixing holder bat clamps (any floor) or for underground work including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on centre line measurement of the total pipeline including specials.				
	(A)Above ground				
	(ii) 160 mm dia.	metre	100	105.20	10520.16
129	Supplying, fitting & fixing Aluminium domical grating				
	(ii) 125 mm	each	200	63.35	12669.44
	(i) 150 mm	each	120	83.71	10045.06
130	Supplying P.V.C. water storage tank of approved quality with closed top with lid (Black) - Multilayer				
	(f) 3000 litre capacity	each	10	17,686.31	176863.12
	(b) 1000 litre capacity	each	10	5,800.79	58007.94
131	Labour for hoisting plastic water storage tank.				
	(i) Upto 1500 litre capacity				
	(a) Upto 1st story from G.L.	each	10	108.60	1085.95
	(b) Extra for each additional story				
	2nd floor	each	10	48.64	486.42
	3rd floor	each	10	48.64	486.42
	4th floor	each	10	48.64	486.42
	(ii) Above 1500 litre upto 5000 litre capacity.				
	(a) Upto 1st story from G.L.	each	10	174.20	1742.05
	(b) Extra for each additional story				
	2nd floor	each	10	81.45	814.46
	3rd floor	each	10	81.45	814.46
	4th floor	each	10	81.45	814.46
132	Labour for punching hole in plastic water storage tank upto 50 mm dia.	each	20	21.49	429.86

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
133	Supplying, fitting and fixing PVC pipes of approved make of (Schedule 80) conforming to ASTMD - 1785 and threaded to match with GI Pipes as per IS : 1239 (Part - I). with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads,fitting, fixing etc. complete in all respect including cost of all necessary fittings as required,jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accesories, specials. Payment for painting will be made seperately)				
	(a) For Exposed Work				
	15 mm dia.	Mtr	10	114.25	1142.51
	20 mm dia.	Mtr	25	145.92	3648.12
	25 mm dia.	Mtr	25	200.22	5005.56
	32 mm dia.	Mtr	30	266.96	8008.90
	40 mm dia.	Mtr	30	330.31	9909.31
	50 mm dia.	Mtr	10	434.38	4343.81
	65 mm dia.	Mtr	15	677.59	10163.83
	(b) Concelled work				
	15 mm dia.	Mtr	25	154.97	3874.36
	20 mm dia.	Mtr	25	178.73	4468.24
	25 mm dia.	Mtr	20	231.90	4637.92
134	Supplying, fitting and fixing cast iron spun pipe conforming to I.S. 1536/1976 with all necessary specials including cutting trenches in any soil or through masonry, concrete etc., if necessary,and mending good all damages including jointing pipes with Tyton joints as per manufacturer's specifications and filling up the trenches all complete but excluding the cost of masonry or concrete work, if required.				
	(b) Class B:				
	(i) 80 mm nominal dia.	Mtr	50	1,518.07	75903.52
	(ii) 100 mm nominal dia.	Mtr	100	1,742.05	174204.80
135	Supplying, fitting and fixing CPVC (Chlorinated Polyvinyl Chloride) pipes of approved make conforming to IS-15778: 2007 . with all necessary accessories,specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required,jointing materials in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accesories, specials.				
	(a) For Exposed Work				
	(i) CPVC Pipes Class-1, SDR-11				
	20 mm	Mtr	10	161.76	1617.62
	25 mm	Mtr	15	235.29	3529.34
	32 mm	Mtr	25	320.13	8003.24
	(b) For Concealed Work				
	(i) CPVC Pipes Class-1,SDR-11				
	15 mm	Mtr	15	158.37	2375.52
	20 mm	Mtr	30	193.44	5803.06
	25 mm	Mtr	15	265.83	3987.48
136	Supplying, fitting and fixing White Vitreous China Sink in position on C.I. brackets including two coats of painting of brackets.				
	(b) Laboratory sink with rim and overflow				
	(i) 450 mm X 300 mm X 150 mm	each	55	2,693.39	148136.30
137	Supplying, fitting and fixing stainless steel sink complete with waste fittings and two coats of painting of C.I. brackets.				
	(a) Sink only				
	(i) 530 mm X 430 mm x 180 mm	each	25	3,715.99	92899.80

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
138	Supplying, fitting and fixing Squating plate with integral flushing in white vitreous chinaware of approved make in cement concrete (6:3:1) with jhama chips complete. (Payment of concrete will be paid seperately).				
	(i) 450 mm X 350 mm	each	5	996.59	4982.94
139	Supplying, fitting and fixing porcelain toilet paper holder of approved make with wooden spindle as necessary.				
	(i) Roll type size 250 mm X 125 mm	each	125	331.44	41430.20
140	Supplying, fitting and fixing push cock of heavy quality and of approved make and brand.				
	(b) Cast iron with brass spindle				
	(i) 15 mm	each	45	235.29	10588.03
141	Supplying, fitting and fixing urinal flush pipe fittings of approved brand.				
	(a) C.P. urinal flush pipe fittings range of one	Each	20	468.32	9366.34
142	e) (ii) CP Wall Mixture without spout but with provision for connnection to Telephone Shower and exposed pipe for Overhead shower (Equivalent toCode No. 5215 & Model - FLORENTINE of JAQUAR or similar brand).	each	30	2,780.49	83414.69
143	f) (i) CP Pillar Cock/ bib cock with 200 mm extended Lever Handle (Equivalent to Code No. 5031 & Model - FLORENTINE of JAQUAR or similar brand).	each	65	1,196.81	77792.62
144	g) CP Sink Cock with Regular Swinging Spout (Table Mounted Model) (Equivalent to Code No. 5357 of JAQUAR or similar brand).	each	25	1,156.09	28902.16
145	Supplying, fitting and fixing complete Bottle waste trap (Heavy Quality) (a) Chromium plated Bottle trap 32 mm with 190 mm long connecting pipe and wall flange (Equivalent to Code No. 545 & Model - Tropical / Sumthing Special of ESSCO or similar brand).	each	225	711.52	160093.08
146	Supplying, fitting and fixing Waste fittings complete.				
	(a) C.P. over brass				
	(i) 25 mm	each	20	170.81	3416.22
	(ii) 32 mm	each	55	214.93	11821.04
147	Supplying,fitting and fixing approved brand 32 mm dia.P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps.				
	(i) 600 mm long	each	250	53.17	13291.60
148	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq. cm. (for water lines only).				
	(ix) 15 mm dia	each	25	495.47	12386.64
	(viii) 20 mm dia	each	50	683.24	34162.24
	(viii) 25 mm dia	each	40	880.07	35202.94
	(vi) 32 mm dia	each	30	1,312.19	39365.76
	(v) 40 mm dia	each	20	1,798.61	35972.16
	(iv) 50 mm dia	each	10	2,575.74	25757.42
	(iii) 65 mm dia	each	7	4,444.48	31111.39
	(iii)80 mm dia	each	15	6,324.54	94868.09
	(i) 100 mm dia	each	15	10,868.57	163028.54
149	Supplying, fitting and fixing chech valve G.M. tested to 21 kg per sq. cm.				
	i) 80 mm	each	3	5,203.52	15610.56
	ii) 100 mm	each	3	7,352.80	22058.40
150	Supplying & laying Double Wall Corrugated (with external annular corrugation and smooth internal walls) High Density Polyethelene Pipes conforming to IS 16098 (Part-II):2013 having Stiffness Class of SN 8 with Ring Stiffness not less than 8.00 KN/Sqm. and Impact Resistance TIR value not more than 10% including necessary jointing materials for nonpressure underground Drainage, Sewerage & Cross drainage application.				
	(i) 150mm internal dia.	Mtr	1000	475.10	475104.00
	(ii) 200mm internal dia.	Mtr	20	683.24	13664.90
	(iv) 300mm internal dia.	Mtr		1,525.99	0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
151	Supplying, fitting and fixing G.I. pipes of TATA make with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, educing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required,jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accesories, specials. Payment for painting will be made seperately)				
	(A) For Exposed Work				
	(a) 25 mm dia. medium quality	Mtr	20	345.02	6900.32
	(b) 32 mm dia. medium quality	Mtr	20	401.58	8031.52
	(c) 40 mm dia. medium quality	Mtr	25	469.45	11736.20
	(d) 50 mm dia. medium quality	Mtr	20	610.85	12216.96
	(e) 65 mm dia. medium quality	Mtr	20	752.25	15044.96
	(f) 80 mm dia. medium quality	Mtr	150	925.32	138798.24
	(g) 100 mm dia. heavy quality	Mtr	100	1,354.05	135404.64
	(B) For Concealed Work				
	(a) 15 mm dia. medium quality	Mtr	10	269.23	2692.26
	(b) 20 mm dia. medium quality	Mtr	15	300.90	4513.49
	(c) 25 mm dia. medium quality	Mtr	15	411.76	6176.35
152	Supplying G.I. pipe strainer with brass net & jacketted of approved quality. (Heavy Type)				
	(iii) 80 mm dia.	each	4	2,121.00	8484.00
153	Supplying butterfly valve				
	i) 80 mm dia	each	3	5,769.12	17307.36
	i) 100 mm dia	each	5	7,692.16	38460.80
154	Constructing Inspection pit to a depth of 1.5 metre (inside), 250 mm thick 1 st class brick work (1:4) in all sites over a layer of jhama brick solling and 150 mm thick cement concreter with strone chips (1:3:6) including necessary earthwork, fitting and fixing approved type SW Master Trap, Construction Masonary invert with cement concrete (1:1.5:3) with stone chips, plastering inside and outside (outside upto 300 mm below G.L.) with 20 mm thick cement plastering (1:4) and neet cement punning, including supplying, fitting and fixing one 560 mm dia. RCC manhole cover of approved make with RCC slab of 100 mm thick with cement concrete (1:1.5:3) with stone chips including necessary Reinforcement (upto 1%) and shuttering and necessary corbelling brickwork (1:4) so that the RCC cover slab rests 150 mm above adjacent GL, cement plaster (1:4) 100 mm thick on all external surfaces of all top slab as directed complete in all respect and removal of surplus earth with all costs of labour and materials (excluding the cost of master trap only)				
	(i) 900 mm x 750 mm (inside) chamber including fitting & fixing S.W. master trap of 150 mm dia. of approved make.				
	(a) With Pakur Variety (SAIL/TATA/RINL)	each	70	7,929.71	555079.84
	External PHE work				
155	Supplying, installing Open well Submersible Pump Motor Sets having 40 cu. mtr per hr flow and motor and 70 mtr. head	each	2	61,600.00	123200.00
	BORE WELL				
156	Labour for boring through any type of soil for sinking tube well of required dia. with top enlargement by rig boring system (either by reserve circulation or by direct rotary method) including hire charges and labour for rig machine, tools and plants, staging, force pumping set and making arrangement for water required for boring etc. complete and lowering of pipes, strainers, blind pipes etc. complete.				
	(b) For depth upto 250 metre for 150 mm dia. Tube well with top enlargement of 250 mm dia.(upto 50 metre).				
	(i) First 50 metre	metre	50	1,205.86	60292.96
	(ii) Next 50 metre	metre	50	1,186.63	59331.44
	(iii) Next 50 metre	metre	50	1,410.61	70530.32
	(iv) Rest 100 metre	metre	100	1,460.38	146037.92

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
157	Supplying, fitting and fixing PVC pipes for underground work of approved make (medium duty) conforming to ASTMD - 1785 and threaded to match with GI Pipes as per IS : 1239 (Part - I). with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted including cost of all materials, jointing materials, cutting pipes, making threads ,cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed complete in all respect. (Payment will be made on the centre line measurement of the total pipe line including all specials No separate payment will be made for accessories, specials.)				
	250 mm	metre	50	4,205.80	210290.08
	150 mm	metre	190	2,076.88	394607.81
	50 mm	metre	60	455.87	27352.42
158	Supplying PVC strainer of approved make with adapter conforming to I.S.12818 specifications.				
	(v) 150mm dia	metre	35	868.76	30406.66
159	Supplying, fitting and fixing Threaded End Cap of approved make conforming to I.S. specifications.				
	150 mm	each	1	341.62	341.62
160	Supplying, fitting and fixing check valve (horizontal) G.M. tested to 21 kg per sq. cm.				
	(vi) 50 mm	each	1	2,492.03	2492.03
161	Supplying, fitting and fixing chech valve (vertical) G.M. tested to 21 kg per sq. cm.				
	(vi) 50 mm	each	1	1,636.85	1636.85
162	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq. cm. (for water lines only).				
	(iv) 50 mm dia	each	1	2,575.74	2575.74
163	Supplying, fitting and fixing heavy type bell mouth reducing socket.				
	(v) 200 mm X 250 mm	each	1	1,705.85	1705.85
164	Supplying, fitting and fixing G.I. cap at top				
	(iv) 300 mm	each	1	817.86	817.86
165	Supplying, fitting and fixing M.S socket ring				
	(iv) 300 mm	each	1	556.55	556.55
166	Washing and developing tube well with air compressor pump and engine for 8 (eight) hours continuous pumping per day with necessary arrangements for testing the yield in gallons per hour with 'V' notch including hire and labour charges for all tools and plants and scaffolding as required.	day	3	8,526.99	25580.96
167	Labour for making arrangement for showing verticality test including the cost for hire charges of tools and plants, scafolding, labour etc. all complete.	L.S.	1	1,036.18	1036.18
168	Collecting sample of water for bacteriological and chemical test from any depth at any time during execution of work including hire and labour charges for tools and plants and sterilising the equipments, paying all charges and fees, testing etc. complete in all respect as per direction.	L.S.	1	1,392.51	1392.51
169	Packing the annular space between the outside of the tube well pipes & strainers and the bore with pea size washed gravel of approved quality having size from 2 mm to 5 mm or the size approved by the Engineer-incharge including cost of all materials labour and equipment complete.	cu. m.	25.00	2,295.20	57380.12
170	Packing annular space between the outside of the housing pipe and the bore with puddled clay balls of approved size as per direction of the Engineer-in-charge with cost of all materials and labour complete.	cu. m.	8.00	471.71	3773.68
171	Providing and fixing bell plug as required upto 250 mm (internal) dia. ERWMS pipe including cost of materials and labour complete.	each	1	487.55	487.55
172	Supplying, fitting and fixing 300 mm M.S. housing clamp of approved quality.	Per Set	2	2,528.23	5056.46
173	Providing 200 mm centre guide.				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	i) With Clamp	Per Set	2	144.79	289.59
174	Geophysical investigation of the acquifer by electrologging system with all tools and plants as necessary including supply of necessary report.	Each Test	1	9,329.01	9329.01
175	Supplying, installing Bore well Submersible Pump Motor Sets having 45 cu. mtr per hr flow and motor and 45 mtr. head	Set	4	84,394.31	337577.24
Internal Road					
176	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m.				
	In ground floor including roof.				
	(b) above 150 mm. Thick	Cum.		1602.91	0.00
177	Box cutting or filling in Road embankment in all sorts of soil including spreading the spoils properly over the flank as necessary or on berm to approximate grade & camber and rolling the sub-grade with power roller to proper camber and grade as per direction and satisfaction of Engineer-in-charge including uprooting and removing plants and jungles when and where necessary.				
	(a) Depth up to 150 mm.	sqm	75.00	16.29	1221.70
178	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement,if any, in ground floor as per relevant IS codes. a) Pakur Variety				
		cum	105.00	6386.00	670530.00
179	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse aggregate, watering including lighting, guarding, barricading and making necessary earthen bundh of one metre width on each side and preparing the bed by necessary cutting or filling, including cost of all materials and hire and labour charges of all men and machinery and compacting to the required density, as per Clause 404 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). .				
	A. Manual Means : Grading-II Aggregate (53 mm to 22.4 mm) Using Stone Screening Type B (11.2 mm)	cum		3849.71	0.00
	B. Grading-I Aggregate (63 mm to 45 mm) Using Stone Screening Type B (11.2 mm)	cum		3875.95	0.00
180	Prime Coat Providing and applying primer coat with Cationic Bitumen Emulsion of approved grade conforming to IS: 8887-1978 and requisite quantity on prepared surface of granular base including cleaning of road surface and spraying primer using Mechanical means including cost and carriage of bitumen emulsion and all other incidental costs of work complete as per Clause 502 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). For WBM / WMM Surface: (with primer @ 0.85 kg/sqm) Page-251, It. No.5.01(i) of P.W®Sch				
	For WBM / WMM Surface: (with primer @ 0.70-1.0 kg/sqm)	Sqm		37.82	0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
181	Bituminous Macadam using Hot Mix Plant (HMP) Providing and laying bituminous macadam with Mobile Hot Mix Plant (Light Duty) using approved crushed aggregates of specified grading as per Table 500.7 premixed with bituminous binder, transported to site laid over a previously prepared surface at specified laying temperature by means of approved and suitable arrangements to the required grade, level and alignment and rolled with suitable power roller for break down, inter-mediate and finished rolling as per specification to achieve the desired compaction including cost and carriage of stone materials and bitumen, hire charges of machinery and equipment, cost of fuel and lubricants and wages of operational staff, quality control complete as per Specifications for Road & Bridge Works of MoRT&H (5th Revision). For Grading 2 (19 mm nominal size, 50-75 mm thick.)				
	B. For Grading 2 (19 mm nominal size, 50-75 mm thick.)				
	i) Using Drum mix Type HMP of minimum capacity 60-90 TPH.	CUM		7874.85	0.00
182	Providing and applying tack coat with Cationic Bitumen Emulsion of approved grade conforming to IS: 8887-1978 on the prepared surface cleaned with Hydraulic broom, moistening the surface including cost and carriage of emulsion, hire charges of machinery and labour, cost of fuel and lubricants all complete as per Clause 503 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). On Granular surfaces treated with primer (Using Bitumen emulsion at the rate of 0.2750 kg per sqm.) Page-251, It. No.5.02(ii) of P.W®Sch				
	(i) On Bituminous Surface (Using Bitumen Emulsion at the rate of 0.20 to 0.30 kg per sqm.)	Sq. M		13.16	0.00
183	(b) 50 mm thick interlocking designer concrete paver block M30 grade for non-traffic zone,buiding premises, garden, parks,domestic drive as per IS: 156582006(over 20-30 mm medium sand bed on 200mm thk bound gnaular /granular base course including cost of sand for sand bed but excluding cost of base course & subgrade preparation.)				
	(i) Grey	Sq. M	750	1019.21	764408.40
184	80 mm thick interlocking designer concrete paver block M-40 grade for medium-traffic zone & utility cuts on arterial roads etc. as per IS: 15658-2006 (over 20-40 mm medium sand bed on 250mm thk WBM/ WMM base course & 250 mm thk bound gnaular/ granular sub-base course & filling the interstices of blocks with fine sand by brooming & ubsequent watering including cost of sand for sand bed but excluding cost of base, sub-base course & subgrade preparation.) complete as per direction of Engineer-in-Charge.				
	Colour Decorative	Sq.M.	1700	1555.40	2644180.00
185	Cast in Situ Cement Concrete M 20 Kerb with Channel				
	Construction of cement concrete kerb with channel with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M10 grade foundation 150 mm thick, kerb channel 300 mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). (The rate is inclusive of cost of all materials, labour, hire and usage charges of machinery and all incidental charges in this connection.)				
	A) Using Concrete Mixer	Meter	310	599.54	185856.16

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
186	Cast in Situ Cement Concrete M20 Kerb				
	Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). (The rate is inclusive of cost of all materials, labour, hire and usage charges of machinery and all incidental charges in this connection.)				
	A) Using Concrete Mixer	Meter	310	316.74	98188.16
187	Dressing and chilchalling Road flanks including cutting and filling with earth up to 150 mm averagethickness finished with outward cross-grade of 1 in30. (Extra quantity of earth for filling shall be obtained fromroad side borrow pits.)	Sqm.	500	13.80	6900.32
Fire Fighting System					
188	Supply, Installation, Testing and Commissioning of Siamese of 4 Way Fire Brigade Inlet Connection to Water Reservoir Tank, Size : 150 NB	No.	1.00	2,678.51	2,678.51
189	Supply, Installation, Testing and Commissioning of Siamese of 3 Way Fire Brigade Drawout Connection from Water Reservoir Tank, Size : 150 NB	No.	1.00	15,021.26	15,021.26
190	Supply, Installation, Testing and Commissioning of CI Butterfly Valves as per IS Standard (PN 1.6), Slim Seal, lever operated type with required Companion Flanges, Nuts, Bolts & Gaskets etc. complete.of followinging sizes:				-
	Size : 200 NB	Nos.	5.00	25,887.51	1,29,437.55
	Size : 150 NB	Nos.	9.00	14,891.17	1,34,020.53
	Size : 80 NB	Nos.	4.00	8,048.54	32,194.16
191	Supply, Installation, Testing and Commissioning of Electrical Motor Driven Pump; Q=136.8 M^3/Hr, MWC=88 with 2900 rpm, Motor =55.0 KW. Pump shall be complete with MS fabricated Common Base Frame, Coupling, Coupling Guard, Vibration Isolator, Foundation Bolts, Companion Flanges, Mechanical Seal to complete set. Pump shall be operated as per TAC norms with CI Casing, Bronze Impeller and SS shaft. **The Pump shall be suitable for Negative Suction of 4.0 Mtr.**	Nos.	2.00	6,44,200.98	12,88,401.96
192	Supply, Installation, Testing and Commissioning of Diesel Engine Driven Standby Pump; Q=136.8 M^3/Hr, MWC=88 with 1800 RPM, Engine HP = 102 HP. Diesel Engine Driven Pump shall be complete with Radiator Cooled Engine, MS fabricated Common Base Frame, Coupling, Coupling Guard, Vibration Isolator, Foundation Bolts, Companion Flanges, Mechanical Seal, Battery, Battery Charger, Control Panel, Connecting Cables, Fuel Tank of 150 Ltr. min. Fuel Pipe, Fuel etc. as re required to complete set. Pump shall be operated as per TAC norms with CI Casing, Bronze Impeller and SS shaft. **Exhaust Pipe with Proper Thermal Insulation and Silencer. The Pump shall be suitable for Negative Suction of 4.0 Mtr.**	Nos.	1.00	9,91,286.17	9,91,286.17
193	Supply, Installation, Testing and Commissioning of Vertical Type Jockey Pump Q=10.8 m3/hr, MWC=88, Motor ~ 4 - 5 KW. Pump shall be complete with MS fabricated Common Base Frame, Coupling, Coupling Guard, Vibration Isolator, Foundation Bolts, Companion Flanges, Mechanical Seal to complete set. Pump shall be operated as per TAC norms with CI Casing, Bronze Impeller and SS shaft. **The Pump shall be suitable for Negative Suction of 4.0 Mtr.**	Nos.	1.00	2,13,257.16	2,13,257.16

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
194	Supply, Installation, Testing and Commissioning of Flexicon Rubber Expansion Bellow at Pump Inlet & Outlet				-
	Size : 125NB (Suitable for Hydrant, Sprinkler, Diesel Engineen Driven Pump).	Nos.	3.00	18,108.25	54,324.75
195	Size : 100NB (Suitable for Hydrant, Sprinkler, Diesel Engineen Driven Pump).	Nos.	3.00	13,882.99	41,648.97
	Size : 40 NB (Suitable for Jockey Pump).	Nos.	2.00	7,391.60	14,783.20
196	Supply, Installation, Testing and Commissioning of Air Relrease Tank of 450 mm dia. X 2000 mm height with Pressure Relief valve & Foundation Bolts & Nuts	Nos.	2.00	1,01,576.61	2,03,153.22
197	Supply, Installation, Testing and Commissioning of Purge Valve of Size : 100 NB	Nos.	2.00	15,113.62	30,227.24
198	Supply, Installation, Testing and Commissioning of "Y" - Type Suction Strainer with Companion Flanges, Bolts, Nuts, Washers, Gaskets etc.				-
	Size : 150 NB	Nos.	3.00	22,602.79	67,808.37
	Size : 80 NB	Nos.	1.00	15,029.89	15,029.89
	Piping Work				-
199	Supply, Installation, Testing and Commissioning of MS ERW Above Ground Pipe Heavy grade as per IS::1239 up to 150 NB pipe & for 200 NB & above sizes pipes as per IS:3589 & thickness 6.3 mm [min.] including fittings. Pipe Shall be of Fe410 Grade.				-
	Size : 200 mm NB X 6.3 mm THK.	Mtr.	24.00	5,243.85	1,25,852.40
	Size : 150 mm NB X 5.4 mm THK.	Mtr.	42.00	3,145.53	1,32,112.26
	Size : 100 mm NB X 5.4 mm THK.	Mtr.	18.00	2,108.73	37,957.14
	Size : 80 mm NB X 4.8 mm THK.	Mtr.	42.00	1,449.18	60,865.56
	Size : 50 mm NB X 4.5 mm THK.	Mtr.	6.00	1,032.90	6,197.40
	Size : 32 mm NB X 4.0 mm THK.	Mtr.	15.00	629.63	9,444.45
	Size : 25 mm NB X 4.0 mm THK.	Mtr.	15.00	532.06	7,980.90
	Size : 20 mm NB X 3.2 mm THK.	Mtr.	18.00	441.00	7,938.00
200	Supply, Installation, Testing and Commissioning of Underground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Auxilary Pipe Supports and 4.0 mm thick "PYPKOTE" polymer corrosion resistant tape as per IS 10221, overlap shall be 15mm minimum including Holiday Test. Pipe Shall be of Fe410 Grade.				-
	Size : 150 mm NB X 5.4 mm THK.	Mtr.	42.00	4,078.26	1,71,286.92
201	Supply, Installation, Testing and Commissioning of Sluice Valve of Non-Rising Spindle, IS:14846, PN-1.6 with Companion Flanges, Nuts, Bolts, Gaskets etc.				-
	Size : 150 NB	Nos.	3.00	24,274.42	72,823.26
	Size : 50 NB	Nos.	1.00	11,363.19	11,363.19
202	Supply, Installation, Testing and Commissioning of Non Return Valve of Wafer Type, PN:1.6, IS : 5312 with Companion Flanges, Nuts & Bolts				-
	Size : 200 NB	Nos.	1.00	20,081.68	20,081.68
	Size : 150 NB	Nos.	3.00	12,260.79	36,782.37
	Size : 50 NB	Nos.	1.00	5,866.97	5,866.97
203	Supply, Installation, Testing and Commissioning of Screwed Gate Valve, IS : 778				-
	Size : 20 NB	Nos.	2.00	1,562.36	3,124.72
204	Supply, Installation, Testing and Commissioning of Cast Iron Foot Valve of following Sizes :	Nos.			-
	Size : 200 NB	Nos.	2.00	33,668.08	67,336.16
205	INSTRUMENTS				-
	Supply, Installation, Testing and Commissioning of Pressure Gauge 16 Kg/cm2 with 3 Way Gauge Cock & Fittings	Nos.	6.00	3,327.65	19,965.90
	Supply, Installation, Testing and Commissioning of Pressure Switch With 3 Way Cock Gauge Cock & Fittings	Nos.	5.00	8,343.84	41,719.20
	Supply, Installation, Testing and Commissioning of Level Gauge 1.5 Mtr. Height	Nos.	3.00	36,386.91	1,09,160.73
	Supply, Installation, Testing and Commissioning of Level Switch (Displacer float Type)	Nos.	2.00	51,466.72	1,02,933.44

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
206	MCC panel				-
	Design, Engineering, Manufacturing, Supply, Installation, Testing and Commissioning of Dust & Vermin Proof Cubicle Type Motor Control Centre fabricated from 14 SWG MS sheet with Powder Coated finish and comprising of required Incommer / Outgoing MCCB, Meters, & Other Accessories including Battery Charger and Battery for above Pump Sets as per NIT. **Electrical Panel Shall be as per Tender Specification as attached.**	Set	1.00	6,94,561.95	6,94,561.95
207	Design, Engineering, Fabrication, Supply, Installation, Testing and Commissioning of Structural Steel Supports for Piping at Pump House	MT.	0.60	1,39,352.87	83,611.72
	HYDRANT SYSTEM				-
					-
	INTERNAL HYDRANT & HYDRANT RISERS				-
208	Supply, Installation, Testing and Commissioning of Aboveground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Auxilary Pipe Supports and Painting. Pipe Shall be of Fe410 Grade.				-
	Size : 150 mm NB x 5.4 mm Thk.	Mtr.	70.00	3,145.53	2,20,187.10
	Size : 100 mm NB x 5.4 mm Thk.	Mtr.	-	2,108.73	-
	Size : 80 mm NB x 4.8 mm Thk.	Mtr.	12.00	1,449.18	17,390.16
	Size : 50 mm NB X 4.5 mm Thk.	Mtr.	-	944.44	-
209	Installation, Testing and Commissioning of Aboveground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Auxilary Pipe Supports and Painting. Pipe Shall be of Fe410 Grade.				-
	Size : 150 mm NB x 5.4 mm Thk.	Mtr.	200.00	770.22	1,54,044.00
	Size : 100 mm NB x 5.4 mm Thk.	Mtr.	-		-
	Size : 80 mm NB x 4.8 mm Thk.	Mtr.			-
	Size : 50 mm NB X 4.5 mm Thk.	Mtr.	-		-
210	Supply, Installation, Testing and Commissioning of Single Headed, (Internal) Hydrant Valves / Landing (As per IS: 5290 Type - A) in SS Construction.	Nos.	15.00	7,982.20	1,19,733.00
211	Supply, Installation, Testing and Commissioning of Fire Hoses with instantaneous SS End Couplings to IS:903				-
	63 mm dia. x 15 m Long	Nos.	30.00	6,172.68	1,85,180.40
212	Supply, Installation, Testing and Commissioning of Branch Pipe & Nozzles, (Solid Jet type) in SS Construction to IS:903	Nos.	15.00	2,354.59	35,318.85
213	Supply, Installation, Testing and Commissioning of First Aid Hose Reel 20 mm dia., 30 Mtr. Long with MS Hose Drum, with 6 mm dia. Nozzle	Nos.	15.00	11,343.67	1,70,155.05
214	Supply, Installation, Testing and Commissioning of Sluice Valve of Non-Rising Spindle, IS:14846, PN-1.6 with Companion Flanges, Nuts, Bolts, Gaskets etc.				-
	Size : 150 mm NB	Nos.	2.00	24,274.42	48,548.84
	Size : 100 mm NB	Nos.	2.00	16,741.02	33,482.04
	Size : 80 NB	Nos.	3.00	12,787.65	38,362.95
215	Supply, Installation, Testing and Commissioning of Non Return Valve of WAFER TYPE, PN:1.6, IS : 5312 with Companion Flanges, Nuts & Bolts				-
	Size : 150 NB	Nos.	5.00	12,260.79	61,303.95
216	Supply, Installation, Testing and Commissioning of CI Butterfly Valves as per IS Standard (PN 1.6), slim seal, lever operated type with required Companion Flanges, Nuts, Bolts & Gaskets etc. complete.of followinging sizes:				-
	Size : 150 NB	Nos.	12.00	14,891.17	1,78,694.04
217	Supply, Installation, Testing and Commissioning of Siamese of 3 Way Fire Brigade Inlet Connection to Hydrant & Sprinkler Risers, Size : 150 NB	No.	3.00	10,898.77	32,696.31
218	Supply, Installation, Testing and Commissioning of Screwed End Gun Metal Gate Valve as per IS : 778,				-

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Size : 40 NB	Nos.	15.00	5,535.24	83,028.60
	Size : 25 NB	Nos.	3.00	2,910.07	8,730.21
219	Supply, Installation, Testing and Commissioning of Screwed End Gun Metal Ball Valve as per IS : 778,				-
	Size : 40 NB	Nos.	3.00	6,987.03	20,961.09
	Size : 25 NB	Nos.	3.00	2,580.95	7,742.85
220	Supply, Installation, Testing and Commissioning of Air Release Valves - Size : 25 mm NB.	Nos.	3.00	2,084.01	6,252.03
221	Supply, Installation, Testing and Commissioning of Pressure Gauge 16 Kg/cm2 with 3 Way Gauge Cock & Fittings	Nos.	3.00	3,327.65	9,982.95
	EXTERNAL PIPING FOR HYDRANT & SPRINKLER SYSTEM				-
222	Supply, Installation, Testing and Commissioning of Aboveground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Auxilary Pipe Supports and Painting. Pipe Shall be of Fe410 Grade.				-
	Size : 150 mm NB x 5.4 mm THK.	Mtr.	24.00	3,145.53	75,492.72
	Size : 80 mm NB X 4.8 mm THK.	Mtr.	18.00	1,449.18	26,085.24
223	Supply, Installation, Testing and Commissioning of Underground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Auxilary Pipe Supports and 4.0 mm thick "PYPKOTE" polymer corrosion resistant tape as per IS 10221, overlap shall be 15mm minimum including Holiday Test. Pipe Shall be of Fe410 Grade.				-
	Size : 150 mm NB X 5.4 mm THK.	Mtr.	612.00	4,078.26	24,95,895.12
	Size : 80 mm NB X 4.8 mm THK.	Mtr.	18.00	2,175.07	39,151.26
224	Supply, Installation, Testing and Commissioning of Single Headed, (External) Hydrant Valves (As per IS: 5290 Type - A) in SS Construction.	Nos.	8.00	7,982.20	63,857.60
225	Supply, Installation, Testing and Commissioning of Fire Hoses - with instantaneous SS End Couplings to IS:903				-
	Size : 63 mm dia. x 15 m Long	Nos.	16.00	6,172.68	98,762.88
226	Supply, Installation, Testing and Commissioning of M.S. Fire Hose Box of 750 x 600 x 200 mm [D] mounted Hose Box For Landing Valve [External] with lock & key	Nos.	8.00	5,282.87	42,262.96
227	Supply, Installation, Testing and Commissioning of Branch Pipe & Nozzles, (Solid Jet type) in SS Construction to IS:903	Nos.	8.00	2,354.59	18,836.72
228	Supply, Installation, Testing and Commissioning of Fire Man Axe as per IS standard of Requisite High Voltage.	Nos.	8.00	1,567.56	12,540.48
229	Supply, Installation, Testing and Commissioning of Sluice Valve of Non-Rising Spindle, IS:14846, PN-1.6 with Companion Flanges, Nuts, Bolts, Gaskets etc.				-
	Size : 150 mm NB	Nos.	3.00	24,274.42	72,823.26
230	Supply, Installation, Testing and Commissioning of CI Butterfly Valves as per IS Standard (PN 1.6), slim seal, lever operated type with required Companion Flanges, Nuts, Bolts & Gaskets etc. complete.of followinging sizes:				-
	Size : 150 NB	Nos.	2.00	14,891.17	29,782.34
231	Supply, Installation, Testing and Commissioning of Siamese of 3 Way Fire Brigade Inlet Connection to Hydrant & Sprinkler Risers, Size : 150 NB	No.	2.00	10,898.77	21,797.54
232	Supply, Installation, Testing and Commissioning of Size : 100 mm Dia. SS-304 Orifice Plate Of 3 mm Thick	Nos.	8.00	3,426.52	27,412.16
					-
	SPRINKLER SYSTEM WITH INTERNAL SPRINKLER RISER				-
					-
233	Supply, Installation, Testing and Commissioning of Aboveground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Like, Bends, Tees, Gaskets, Flanges, Nuts & Bolts, Auxilary Pipe Supports and Painting as per Fire Norms. Pipe Shall be of Fe410 Grade.				-

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Size : 150 NB	Mtr.	108.00	3,145.53	3,39,717.24
	Size : 100 NB	Mtr.	294.00	2,108.73	6,19,966.62
	Size : 80 NB	Mtr.	164.00	1,449.18	2,37,665.52
	Size : 65 NB	Mtr.	81.00	1,178.60	95,466.60
	Size : 50 NB	Mtr.	87.00	1,107.05	96,313.35
	Size : 40 NB	Mtr.	126.00	797.44	1,00,477.44
	Size : 32 NB	Mtr.	273.00	676.46	1,84,673.58
	Size : 25 NB	Mtr.	926.00	568.48	5,26,412.48
234	Installation, Testing and Commissioning of Aboveground Piping - ERW, MS Black as per IS:1239 Heavy Grade and as per IS:3589 above 150 mm dia. pipe with Pipe Fittings, Like, Bends, Tees, Gaskets, Flanges, Nuts & Bolts, Auxilary Pipe Supports and Painting as per Fire Norms. Pipe Shall be of Fe410 Grade.				-
	Size : 150 NB	Mtr.	-	3,145.53	-
	Size : 100 NB	Mtr.	-	2,108.73	-
	Size : 80 NB	Mtr.	6.00	1,449.18	8,695.08
	Size : 65 NB	Mtr.	21.00	1,178.60	24,750.60
	Size : 50 NB	Mtr.	33.00	1,107.05	36,532.65
	Size : 40 NB	Mtr.	126.00	797.44	1,00,477.44
	Size : 32 NB	Mtr.	153.00	676.46	1,03,498.38
	Size : 25 NB	Mtr.	570.00	568.48	3,24,033.60
235	Supply, Installation, Testing and Commissioning of hydraulically operated Sprinkler control valve, with water motor gong bell and trims as required, pressure gauges, drain valves, ball valves check valves, strainers etc. complete. Alarm valve shall be UL Listed / FM approved.				-
	Size : 150 NB	No.	1.00	59,196.54	59,196.54
236	Supply, Installation, Testing and Commissioning of CI Butterfly Valves as per IS Standard (PN 1.6), slim seal, lever operated type with required Companion Flanges, Nuts, Bolts & Gaskets etc. complete.of followinging sizes:				-
	Size : 150 NB	Nos.	12.00	14,891.17	1,78,694.04
237	Supply, Installation, Testing and Commissioning of Sluice Valve of Non-Rising Spindle, IS:14846, PN-1.6 with Companion Flanges, Nuts, Bolts, Gaskets etc.				-
	Size : 80 mm NB	Nos.	1.00	12,787.65	12,787.65
238	Supply, Installation, Testing and Commissioning of Screwed End Flow Indicator with Valve of Gun Metal Construction, Heavy Duty				-
	Size : 25 NB	Nos.	5.00	7,818.29	39,091.45
239	Supply, Installation, Testing and Commissioning of Flow Switch suitable for 1 NC+1 NO Potential Free Contact.				-
	25 NB	Nos.	5.00	11,019.75	55,098.75
240	Supply, Installation, Testing and Commissioning of Screwed End Gun Metal Gate Valve as per IS : 778,				-
	Size : 40 NB	Nos.	1.00	5,535.24	5,535.24
	Size : 25 NB	Nos.	20.00	2,910.07	58,201.40
241	Supply, Installation, Testing and Commissioning of quartzoid bulb type Sprinkler with 15mm screwed end connection of 68 deg. C. temperature rating and orifice shall not be less than 6mm.Sprinklers shall be UL Listed approved with SS Russel Plate.				-
	Pendent sprinkler	Nos.	815.00	599.71	4,88,763.65
	Upright sprinkler	Nos.	295.00	511.25	1,50,818.75
242	Supply, Installation, Testing and Commissioning of SS Flexi Dropper of 25 x 15 mm dia. 1000 mm long for Sprinkler as per UL Listed.	Nos.	295.00	1,360.72	4,01,412.40
243	Supply, Installation, Testing and Commissioning of Air Release Valves - Size 25 mm NB.	Nos.	1.00	2,084.01	2,084.01
244	Supply, Installation, Testing and Commissioning of Pressure Gauge 16 Kg/cm2 with 3 Way Gauge Cock & Fittings	Nos.	1.00	3,327.65	3,327.65
					-
	PORTABLE EXTINGUISHERS				-

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
245	Supply, Installation, Testing and Commissioning of CO_2 type Extinguisher of 4.5 Kg weight (as per IS-15683) with fire rating 21B, made of high pressure seamless steel cylinder duly IS:7285 marked fitted wheel type valve duly IS:3224 marked, and internal discharge tube, discharge Hose, Discharge Horn, charged with liquified CO_2 gas complete with wall mounting Bracket and with MS fixing clamps (wall Hook) arrangement - all ISI marked make.	Nos.	20.00	8,256.69	1,65,133.80
246	Supply, Installation, Testing and Commissioning of CO_2 type Extinguisher of 2.0 Kg weight (as per IS-15683) with fire rating 21B, made of high pressure seamless steel cylinder duly IS:7285 marked fitted wheel type valve duly IS:3224 marked, and internal discharge tube, discharge Hose, Discharge Horn, charged with liquified CO_2 gas complete with wall mounting Bracket and with MS fixing clamps (wall Hook) arrangement - all ISI marked make.	Nos.	10.00	6,190.89	61,908.90
247	Supply, Installation, Testing , Commissioning of ABC stored pressure type (ISI marked) extinguisher including all accessories with wall bracket with rawl plug. Capacity 6 kg. ISI marked	Nos.	20.00	2,945.19	58,903.80
248	Supply, Installation, Testing and Commissioning of Mechanical Foam type Fire Extinguisher, "ISI" marked (IS:15683) in HP Mild steel Cylinders fitted with Pressure Indicating Gauge, Internal Tube, sqeeze Lever type Valve; complete in all respects, including wall suspension Bracket/ Trolly Mounted - 50 Litres capacity -all ISI marked make.	Nos.	2.00	13,066.04	26,132.08
249	Supply, Installation at approved location of approved make Fire Buckets each of standard 9 Litres Capacity and of round-bottomed shape, painted white inside and Red outside and Black on the bottom, inscribed with letters "FIRE" in Black & Bold. Cost shall be inclsive of providing MS Stand duly painted over a coat of Primer along with Three nos. Buckets Hooked in series with the Stand.	Set	4.00	5,010.99	20,043.96
250	Supply, Installation, Testing and Commissioning of Modular Thermatic Type Fire Extinguisher for Electrical Sub Station of Capacity 5 Kg.	Nos.	14.00	29,788.85	4,17,043.90
251	Design, Engineering, Fabrication, Supplying, Installing, testing and commissioning of Structural Steel Supports including Painting for Fixing of Modular Fire Extinguisher	MT.	0.60	1,39,352.87	83,611.72
					-
252	**SIGNAGES**				-
i.	Providing and installing in position the following type of AUTOGLO Photoluminescent Signages complete with fasteners				-
	Signage with printed " FIRE EXIT"(Size :100mmX300mm)	Nos	45.00	630.93	28,391.85
ii.	Floor identification Signage (i.e., 1/2/3 ...etc.) Size 200mm x 200 mm at each stair enclosure on every floor	Nos	15.00	630.93	9,463.95
iii.	Identification of Location Signage ("YOU ARE HERE") with Floor Plans, 1.5 cm height Letters in Red with suitable back ground Clour. The Size of Board shall be 600mm x 250 mm at fixed at suitable height on every floors.	Nos	15.00	8,386.77	1,25,801.55
iv.	Providing and fixing in position the signage "FIRE ORDER" it should contain the following matter on 3mm thick "Opaque" PVC foam board of computerized cut, PVC non- reflective self adhesive vinyl painted foam board of 3' x 4'.	Nos	15.00	2,785.18	41,777.70
					-
	A) ALERT THE SECURITY AT SECURITY ROOM BY ACTUATING MANUAL CALL POINT ACTUATING MANUAL CALL POINT LOCATED AT STRATEGIC LOCATIONS.				-
					-

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	B) EVACUATE THE OCCUPANTS BY USING FIRE EXITS AND EMERGENCY EXITS ONLY AND ASSEMBLE AT VARIOUS ASSEMBLY POINTS.				-
					-
	C) IF POSSIBLE TRY TO EXTINGUISH THE FIRE BY USING NEAREST / SUITABLE PORTABLE EXTINGUISHER OR WATER FROM NEAREST WET RISER.				-
					-
	D) BE CALM AND DO NOT GIVE ANY ROOM FROM PANIC, WALK, DO NOT RUN.				-
					-
	E) IF YOU ENCOUNTER SERIOUS DIFFICULTY IN EVACUATION, FLAT AND TRY TO ATTRACT ATTENTION OF RESCUE TEAM.				-
					-
	ACTION BY SECURITY / RECEPTION UPON RECEIPT OF INFORMATION THROUGH FIRE ALARM OR FIRE DETECTORS OR BY USING PUBLIC ADDRESS SYSTEM.				-
					-
	A) ALERT THE OCCUPANTS BY USING PUBLIC ADDRESS SYSTEM.				-
	B) INFORM FIRE CONTROL THROUGH ANY ONE OF THE FOLLOWING PHONE NUMBERS: 101/ (Local fire office phone numbers to be given.)				-
	C) REFER EVACUATION PLAN FROM EVACUATING STANDARD PEOPLE.				-
	D) GUIDE THE FIRE FORCE, ON THEIR ARRIVAL TO THE SEAT OF FIRE.				-
	E) IN CASE OF THE CASUALTIES, CALL AMBULANCE BY DIALLING NUMBER……				-
	FIRE FIGHTING AGNECY ----------				-
	PHONE : ----------				-
	FAX : ----------				-
WATER TREATMENT PLANT					
	WTP		-		
253	Planning, Designing, Detailing, Manufacturing, Supplying, Erection, Testing and Commissioning of Water treatment plant for supply of treated water for use of domestic purpose comprising of filter and pumps. The plant is to be installed in pump room and Raw water supply is available in UGT including design of all Civil, Structural, Electrical, Mechanical, Plumbing and processing, ancillary equipments & works etc required to complete the package, getting approval from client.				
	Providing and fixing Horizontal/vertical in line raw water filter feed pumps with CIcasing and SS impellar and with stainless steel shaft and mechanical seal , connected to a TEFC induction motor suitable for 400/440 volts,1500 RPM, 3 phase 50 cycles A.C. supply having IP 55 protection enclosure. complete with base frame, vibration eliminating pads, nuts and bolts, pressure gauge on delivery side etc. with suction strainer	Set	1.00	2,18,064.00	218064.00
254	Raw water filter feed pumps(only for domestic use).		-		
	Capacity : 25m3/hr		-		
	Head 30 m		-		
	with 100% standby pumps(1W+1S) 2 Nos.		-		
	Make: KIRLOSKAR/EQV				
	Providing and fixing C.I. "Y" Type suction strainer with stainless steel perforated sheet screen,flangfd ends iner installed outside water tanks. (Make: Leader / Zoloto / Kartar or equivalent)				
	50/80 mm dia (min.) or required size and required number(1 Set)				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Providing and fixing gun metal or bronze ball valves/butterfly valve/NRV/Rotameter, tested to 15.00 Kg / cm2, screwed end connections complete . (Make: Leader/ Zoloto or equivalent)				
	80/50 mm NB (min.) or required size and number(1 Set)				
	Filtration Plant : Vertical Down flow Multigrade Pressure Sand Filter in MS Welded construction fabricated in accordance with IS 2825 from minimum 6 mm thick M.S. plate on shell and minimum 8 mm thick M.S. plate on dished ends as per applicable IS standards. The filter shall have :				
	a) One no pressure tight manhole and at least one no. pressure tight side hole for maintenance purposes.		-		
	b) Initial charge of Filter Media.		-		
	c) Complete underdrain system and raw water distributor as per manufacturer's design.		-		
	d) M.S. heavy class fabricated - epoxy coated face piping comprising of connections with CI Butterfly Valves of required size for inlet, outlet, backwash inlet, backwash drain and rinse drain. Air release line with GM Ball Valve of required size.				
	e) Pressure gauges (100 mm dia bourdon type pressure gauge) / Sampling points with SS isolation cocks at inlet and outlet.		-		
	f) All internal parts of the filtration plant shall be coated with two coats of food grade epoxy paint after thorough sand blasting. All external surfaces of the plant including piping shall be coated with two coats of red iron oxide / zinc chromate primer followed by two coats of high gloss enamel paint .				
	g) The filter shall be complete with all gaskets / fasteners of standard quality as required.		-		
	h) The filter shall be designed to give rated output at given raw water quality and flow rate without any operational problem and should not get any loss of performance as long as the operating pressure remains within the given range. Any additional provision is required to make the item complete, the same should be included herein. The work has to be carried through authorised vendor, dealer/representative of approved make. The filter water will be supplied to treated water tank through activated carbon filter, Softener & UV water sterliser.				
	Capacity - 25M3/hr		-		
	Filtration rate - 18,000 lph/sqm (min.)		-		
	Filter dia approx. 1350mm (min)		-		
	Filter HOS Min. : 1500 mm (min.)		-		
	Working pressure : 3.0 Kg/sq cm.		-		
	Test pressure : 4.5 Kg/sq cm		-		
	No. Of Unit - 1 Set	Set	1.00	2,24,878.50	224878.50
255	Activated Carbon Filter in MS Welded construction fabricated in accordance with IS 2825 from minimum 6 mm thick M.S. plate on shell and minimum 8 mm thick M.S. plate on dished ends as per applicable IS standards. The filter shall have :				
	a) One no pressure tight manhole and at least one no. pressure tight side hole for maintenance purposes.		-		
	b) Initial charge of Na+ resin		-		
	c) Complete underdrain system , raw water distributor and brine injection system as per manufacturer's design.		-		
	d) M.S. heavy class fabricated - internally rubberlined face piping comprising of connections with CI Butterfly Valves of required size for inlet, outlet, backwash inlet, backwash drain and rinse drain. Air release line with GM Ball Valve of required size.				
	e) Pressure gauges (100 mm dia bourdon type pressure gauge) / Sampling points with SS isolation cocks at inlet and outlet.		-		

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	f) All internal parts of the softening plant shall be internally rubberlined with minimum 2.5mm thickness after thorough sand blasting. All external surfaces of the plant including piping shall be coated with two coats of red iron oxide / zinc chromate primer followed by two coats of high gloss enamel paint .				
	g) The filter shall be complete with all gaskets / fasteners of standard quality as required.		-		
	h) The filter shall be designed to give rated output at given raw water quality and flow rate without any operational problem and should not get any loss of performance as long as the operating pressure remains within the given range. Any additional provision is required to make the item complete, the same should be included herein. The water shall be received from pressure sand filter and supplied to softener before being sent to treated water tank.				
	Capacity - 25M3/hr		-		
	Filtration rate - 18,000 lph/sqm (min.)				
	Filter dia approx. 1350mm (min)				
	Filter HOS Min. : 1500 mm (min.)		-		
	Working pressure : 3.0 Kg/sq cm.		-		
	Test pressure : 4.5 Kg/sq cm				
	No. Of Unit - 1 Set	Set	1.00	2,65,765.50	265765.50
256	Chlorine Dosing System		-		
	Diaphragm type metering pump for chemical dosing into chlorine contact tank capacity 0-6 LPH complete with chemical storage tank , Inlet and outlet connection.	Set	1.00	24,532.20	24532.20
			-		
257	Providing and fixing G.I.pipes/CPVC pipes to I.S. 3589/1239 (Heavy class) with G.I./CPVC Fittings e.g., Tee, elbow reducers, unions, end cap etc., flanges & clamps, including supporting the pipes with MS supports, cutting and making good the walls etc. complete. For Suction & Delivery headers and interconnecting piping.	Lot	1.00	54,516.00	54516.00
258	Painting G.I./CPVC pipes with two or more coats of synthetic enamel paint of approved quality and shade over a coat of approved priming coat as directed by the Project-in-charge (shade as per pipe colour code).	Lot	1.00	13,629.00	13629.00
			-		
259	Supplying, assembly, erection, testing and commissioning of level controllers based on level switches and necessary auxiliary circuits included in the electric panel ,including all accessories required for the performance of the system to the satisfaction of the engineer in charge complete including providing and fixing wiring from control panel to the level switches of required size, all interconnections as required . Note : The required transformers / associated equipment shall be designed keeping in view the actual distance of various tanks from the control panel. The most suitable route of sensor cable travel between the panel and the tank shall have to be worked out by the contractor according to site conditions and in consultation with engineer in charge. All cabling / switch installation should be done in an easy to maintain manner.				
	Two way - Two tank level controller as under.				
	For Filter Feed Pumps for Domestic Water.(Operating between the raw water tank and the treated water tank near the plant room.	Set	2.00	7,495.95	14991.90
260	ELECTRICAL CONTROL PANEL				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Supply, installation, testing and commissioning of following Water supply pumps & treatments units Electrical control panel suitable for 415 V, 3 phase, 4 wires, 50 Hz power distribution system. The panel shall be free standing floor mounting sheet metal enclosed dust and vermin proof conforming to IP-42, compartmentalized design, fabricated out of 14 SWG sheet steel, painting, earthing numbering, danger plate as per specifications and drawings, flush front with Aluminium busbars current density (1Amp/Sq mm), separate earth bus bars to be provided throughout the length of the panel. The incoming and outgoing feeder breakers, fuses, indicating lamps etc shall be accommodated in a modular multitier arrangement. The panel shall be powder coated through 9 tank process. Adequate size cable alley shall be provided all round the panel and in the back for each cable bending and termination. The outgoing feeders inside the panel shall be connected through solid bus bars. Flexible cable links are not acceptable.				
	Bus bars shall be provided with heat shrinkable sleeves and shall be colour coded. The panels shall be suitable for cable entry from top. The panels shall be fabricated after the approval of fabrication drawings.				
			-		
	2 Nos. earthing terminals shall be provided for 3 phase, 415 V, 50 HZ supply system. M Lifting hooks shall also be provided in case of large panels.				
			-		
	Starters shall be provided with MCCB, suitable for the specified Kw of motor of the pumps ,contectors, single phasing preventor, on-off Trip Indication Lamps, Start Stop Push Buttons, Auto Manual selector switch Ammeter with Suitable ratio CTs, Auxillary Contacts for Building Automation system and remote control, interlocking etc		-		
	Incoming :		-		
	One (1) No. 300A TPN 35KA MCCB with microprocessor overload and short circuit release load		-		
	C. T. operated / Direct Digital voltmeter/Ampere Meter.				
	1 Set (3 Nos) of phase indication lamps with 2 Amp SP MCB.				
	Electrolytic high conductivity aluminium three phase and neutral busbars rated at 500 amps having a maximum current density of 0.8 amp per sq mm suitable to with stand symmetrical fault level of 25 MVA at 415 volts. The neutral busbar is to be of 100% capacity.				
	OUT GOING				
	2 nos 63 Amp, 415 Volts TPN MPCB 15 KA having overload and short circuit protection with DOL Starter for filter feed pump				
	1 Nos. 125 Amp, TPN MPCB 10 KA having overload and short circuit protection for Domestic water transfer pumps provision only for connection				
	Spare Feeder 3 H.P - 2 Nos. Fully automatic DOL starter				
	1 Nos. 10 Amp, TPN MPCB 10 KA having overload and short circuit protection for dosing pump				
	Each DOL Starter shall have				
	On-OFF Push Button / ON -OFF Indication Lamp, thermal O/L Type Relay, Contactor etc. as required.				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	A / M / OFF Selector Switch. 3 way				
	Single Phase Preventor MPR D-2 current operated.				
	C. T. operated / Direct Digital Ampere Meter.				
	Spare NO-NC contacts for each starter				
	Each O/G feeder shall have				
	ON -OFF Indication Lamp				
	Complete set as mentioned above	Set	1.00	61,330.50	61330.50
261	Lump sump work of plant room cabling including cable, cable trays, support etc .	Job	1.00	20,443.50	20443.50
	The cabling shall be done as per the instruction of engineer incharge.				
262	2nd Year DLP	L.S.	1.00	1,02,217.50	102217.50
263	3rd Year DLP	L.S.	1.00	1,22,661.00	122661.00
SEWARA	**SEWAGE TREATMENT PLANT 200 kld**				
	Design, Supplying, Installing, Testing & Commissioning of Sewage Treatment Plant capacity 200 KLD**.** **The plant proposed shall be 200kld with a main pump room. The plant is proposed to be installed in the Under-ground from the pump room itself. For future maintenance Opening shall be provided on above for this purpose, for the following:**				
	Nature of effluent - Domestic Sewage from Toilet use and kitchen waste,washing waste water.				
	Daily average flow - 200 Cum / Day				
	pH - 6.5 - 8.5				
	BOD5 - upto 250-450 Mg/L				
	S. Solids - 250 - 400 Mg/L				
	COD - upto 450-600 Mg/L				
	Oil & Grease - 50 Mg / L				
	Treated Water Parameters				
	Daily average flow - 200 Cum / Day				
	pH - 6.5 - 8.5				
	BOD5- <10Mg/L				
	S. Solids - <50 Mg/L				
	COD - <50 Mg/L				
	Oil & Grease - <5 Mg / L				
264	**Electro Mechanical Work**				
A	Supply, installation, testing & commissioning of 2 Nos Stainless Steel Perforated Screen with suitable lifting arrangement (size 600 mm wide x 1200 mm height approx)	Set	1	35790.75	35790.75
	Make: ENWECO				
B	Supply, installation, testing & commissioning of electronic type level controller for automatic operation of the system with high/low level sensors complete with auxiliary NO/NC contacts.	Set	1	22024.46	22024.46
C	Supply, installation, testing & commissioning of non clogging type pumps, having C.I. casing & bronze impeller complete with all accessories, motor of required capacity. Delivery header with isolation valve, pressure gauge on delivery line with isolation cock level controller with wiring to control the level of sump automatically. Pump shall have following duty.				
	Cost shall be inclusive of PVC flexible Hose pipe (for piping submerged in effluent) with M S epoxy piping (for piping non-submerged in effluent)				
	Provision of guide ropes to guide submersible pump from upper level to operational level in sump basin with channels / angle section of MSEP shall be made by the STP contractor.				
	Submersible sewage Transfer Pumps (2 Nos. - One working & one standby)				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	(Solid handling Cap. 38 mm)				
	Flow rate (each) = 10 m3 / hr				
	Head = 8-10 Mtr	Set	1	247775.22	247775.22
	Make: Crompton/Kirloskar/Wilo				
D	Plant room sump pump 2 Nos (1 working + 1 standby) .				
	Flow rate = 15 cum/hr				
	Head = 15 Mtr	Set	1	247775.22	247775.22
	(Solid handling size for this pump shall be 12 mm).				
	Make: Crompton/Kirloskar/Wilo				
E	Mono block centrifugal Sludge Transfer Pumps (2 Nos. - One working & one stand by)				
	(Solid handling cap. 10 mm)				
	Flow rate (each) =2 m3 / hr				
	Head = 8-10 Mtr	Set	1	110122.32	110122.32
	Make: Kirloskar				
265	Belt type oil skimmer with inbuilt mounting unit, motor, pully and oil collection box	set	1	82591.74	82591.74
266	**Air Diffusion System**				
	Twin type rotary air blowers (one working & one standby) capable of delivering 235 cum/hr (each) of free air at 0.5 kg/cm2 driven through "V" belt or directly coupled through flexible coupling to a TEFC motor of suitable HP Suitable for 415 ± 10% volts, 3 phase, 50 cycles a/c supply	Set	1	371662.83	371662.83
	Make: Beta/ABL/Everest				
267	Air piping shall comprise of pipes droppers/ laterals with M S (epoxy coated) Header complete with all fittings such as tees, crosses, plugs, sockets, elbows, reducers, supports & clamps, puddle flanges etc cutting chases & making good.	Lot	1	68826.45	68826.45
268	Non clog type air dispersion system capable of handling 3-5 cfm of air with oxygen transfer efficiency of 3-4% per/meter water depth. Air dispersion grid shall be assembled in modular form so that they can be replaced / repaired				
A	For equalization tank -1 Nos. (Coarse Bubble diffuser)	Lot	1	34413.23	34413.23
B	For sludge holding tank - 1 No.(Coarse Bubble diffuser)	Lot	1	20647.94	20647.94
C	For MBBR tank- 2Nos. (Fine Bubble diffuser)	Lot	1	75709.10	75709.10
Note :	*Air dispersion system shall be provided for Equalization Tank, Sludge holding Tank and MBBR Tank.*				
269	Supply, installation, testing and commissioning of Fludised Media for Aeration Tank (MBBR Media). The minimum surface area of media will be 360m2/m3. Packing volume-40%. Surface loading rate of media - 2-2.5kg BOD/M3	lot	1	385428.12	385428.12
270	Supply, installation, Testing and Commissioning ofUv stabilised PVC Tube deck Media in tube settler tank	lot	1	117004.97	117004.97
271	**Sludge Disposal System**				
	Providing, installation, testing & commissioning of positive displacement screw pump for feeding sludge into Filter press				
	Capacity 2 m^3/hr @40m head	No	2	96357.03	192714.06
	Make:Roto				
272	Supply ,installation, testing and commissioning of filter press with PP plates and CI/ MS body frame	Set	1	245022.16	245022.16
	Plate size- 18"x18"				
	No of plates- 23				
	Make: universal/Pharmatech/MICO				
	Tertiary Treatment				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
273	Supplying, installing, testing & commissioning of centrifugal vertical / horizontal filter feed water pumps C.I. Body, bronze impeller with mechanical seal along with motor. Pressure gauge with isolation cock, NRV, Isolation valve on delivery line. Isolation valve, strainer at suction. The pump shall be suitable for 415 ± 10% volts, 3 phase, 50 cycles a/c supply.				
	Capacity : 13 M3/hr.				
	Head : 25 M				
	No. of Pumps (1 working + 1 standby)	Set	1	110122.32	110122.32
	Make: Kirloskar				
Note:	*Operation of pump shall be based on level controller proposed to be installed in tank as per site location. The contractor to ascertain the Head required for pumps as per site conditions and provide accordingly.*				
274	Supplying, installing, testing and commissioning of MSEP vessel filter with frontal piping and associated valves and accessories. Filter shall be suitable for a minimum working pressure of 3.0 kg / cm2 and shall include media, standard fittings like pressure tight manholes, initial charge of media, raw water distributor, under drain system, face piping, pressure gauges etc.,				
A	Multi grade filter containing Pebbles, gravels, coarse sand and Fine sand				
	Flow rate : 13 cum/hr				
	Filter Diameter : 1200mm, Height 1500 mm	Set	1	220244.64	220244.64
	Make: ENWECO				
B	Activated Carbon Filter containing Activated carbon of ID value900 and other supporting media as required				
	Flow rate : 13 cum/hr				
	Filter Diameter : 1200mm Height 1500 mm	Set	1	247775.22	247775.22
	Make: ENWECO				
C	Diaphragm type metering pump for chemical dosing into chlorine contact tank capacity 0-6 LPH complete with chemical storage tank , Inlet and outlet connection.	Set	1	24777.52	24777.52
	Make: e-dose/LMI				
275	**ULTRA FILTRATION (UF)**				
	Providing of Ultra Filtration System (UF) of capacity 10 m^3/hr. The system should be complete with Back Wash Pump (1W+1S)), Cartidge Filter, UF Membrane with Skid, Flushing/Cleaning System, complete instrumentation for automation and monitoring Rotameter, pressure guage, interconnecting pipe, vales/solenoid valve & other accessories to complete the system (Make : Toray/Eq.)				
	2 no. UF feed pump ,capacity 10M3/hr@ 25M, MOC - SS Make Wilo				
	2 no. UF backwash pump, Capacity 10M3/hr@ 25M, MOC- SS Make Wilo				
	1 no. UF CIP pump, Capacity 10M3/hr@ 25M, MOC- SS Make Wilo				
	1 Set Micron Cartridge filter set - 10M3/hr				
	1Set Micron Cartridge filter set - 10 M3/hr				
	3 no. UF membrane module make Toray/GE \/ Eqv				
	1 Set Electrical control panel- PLC based				
	6 no. Motorised valve/solenoid valve				
	4 no. Metering pump with tanks				
	1 Lot Instrumentation e.g pressure guage, rotameters, ph meter				
	1 Lot Piping and valve				
	1 Lot Skid for plant - SS				
	Miscellinious items				
		Set	1	1858314.15	1858314.15
276	Providing and fixing all piping (as described below) and isolation control valves for making the system complete.				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	uPVC :Submerged air piping				
	MS Epoxy : Air piping				
	uPVC piping :Equipment Inter connecting and pump headers	Job	1	488667.80	488667.80
277	Supply, installing, testing & commissioning of **Ultravoilet** dis-infection unit for tertiary treated water (with flow rating 10m3/hr) with bypass arangement . The dis-infection chamber shall be constructed of SS 316L on all weted parts. The UV lamp shall be of low pressure mercury vapour type with hard glass enclosure, the sockets shall be water tight & vibration resistant. The lamp life shall be rated for 9000 hours. The access to the UV lamp shall be without the need to interrupt the ballast circuit with all necessary accessories as required, complete in all respect.	No.	1	234009.93	234009.93
278	Instrumentation				
A	PH Meter to be installed at the outlet of STP	No	1	24777.52	24777.52
B	Electro magnetic flow meter (0-15000LPH)	No	1	57814.22	57814.22
279	**ETP Equipments**				
	Supply, installation, testing & commissioning of 2 Nos Stainless Steel Perforated Screen with suitable lifting arrangement (size 500 mm wide x 500 mm height approx)	Set	1	30283.64	30283.64
	Make: ENWECO				
280	Supply, installation, testing & commissioning of electronic type level controller for automatic operation of the system with high/low level sensor complete with auxiliary NO/NC contacts.	Set	1	3441.32	3441.32
281	Supply, installation, testing & commissioning of non clogging type pumps, having C.I. casing & bronze impeller complete with all accessories, motor of required capacity. Delivery header with isolation valve, pressure gauge on delivery line with isolation cock level controller with wiring to control the level of sump automatically. Pump shall have following duty.				
	Cost shall be inclusive of PVC flexible Hose pipe (for piping submerged in effluent) with M S epoxy piping (for piping non-submerged in effluent)				
	Provision of guide ropes to guide submersible pump from upper level to operational level in sump basin with channels / angle section of MSEP shall be made by the STP contractor.				
	Submersible effluent Transfer Pumps (2 Nos. - One working & one standby)				
	(Solid handling Cap. 38 mm)				
	Flow rate (each) = 3 m3 / hr				
	Head = 8-10 Mtr	Set	1	165183.48	165183.48
282	PH meter at the inlet and outlet of neutralisation pit	No	2	24777.52	49555.04
283	Diaphragm type metering pump for chemical dosing into chlorine contact tank capacity 0-6 LPH complete with chemical storage tank , Inlet and outlet connection.	Set	2	24777.52	49555.04
	Make: e-dose				
284	Supply, installation, testing and commissioning of mechanical agitator for chemical mixing into neutralisation tank	Set	1	74332.57	74332.57
285	Supply, Installation, Testing and commissioning of Electromagnetic Flow meter at the outlet of effluent transfer pump	Set	1	57814.22	57814.22

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
286	Supplying, installing, testing & commissioning of centrifugal vertical / horizontal Treated water pumps C.I. Body, bronze impeller with mechanical seal along with motor. Pressure gauge with isolation cock, NRV, Isolation valve on delivery line. Isolation valve, strainer at suction. The pump shall be suitable for 415 ± 10% volts, 3 phase, 50 cycles a/c supply.				
	Capacity : 20 M3/hr.				
	Head : 25 M				
	No. of Pumps (1 working + 1 standby)	Set	1	165183.48	165183.48
	Make: Kirloskar				
	ELECTRICAL INSTALLATION (COMMON FOR ETP AND STP)				
287	Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of motor control centre fabricated out of 14 gauge CRCA sheet steel. Cable gland plates shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anticorrosive process before painting as per specifications with 2 coats of red oxide primer and final approved shade of powder coated paint. 2 Nos. earthing terminals shall be provided for 3 phase, 4 wire, 50 Hz supply system. Lifting hooks shall also be provided in case of large panels. Approval shall be taken for each panel before fabrication. Quoted rates shall be inclusive of cables (in accordance to specification) with earthing from panel to each motor / equipment.				
	Motor Control Centre				
	INCOMING				
	200 amps TPN MCCB with the following accessories:				
	0-500 volts 96 x 96 mm square electronic voltmeter with selector switch shall be protected by 2 amps TP MCB. 1 Set				
	0-100 amps 96 x 96 mm square electronic ammeter with selector switch and 100./5 amps 10 VA CL:1 CTs. 1 Set				
	Phase indicating lamps shall be protected by 2 amp SP MCB 3 Sets				
	BUS BAR				
	200 amps TPN (15 KA) copper bus bar with heat shrinkable insulation sleeves.				
	a. Required Nos of required capacity TPN MCB for direct on line starter/star delta starters and out going feeders to all the pumps/blowers etc. (including standbies). Each compartment shall contain auto / manual selector switch and indicating lamp with MCB's for 'ON/OFF/TRIP' status of motor.				
	Spare MCB's of following capacities:				
	32 amps TPN MCB's 3 Nos.				
	Necessary cable alleys, internal / cabling, wiring, cabling from MCC to various pumps / equipment and interlocking, earthing for all equipment shall also included				
	Notes :-				
	All MCCBs / MCBs shall be of 15 KA breaking capacity and suitable for motor duty application.				
	All motor starters shall be provided with Automatic level controller				
	DOL starters shall be used for motors below 7.5 HP and Star-Delta Starters for other motors .				
	Provision shall be made for providing potential free contacts to all pumps starters				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	MCC for all STP equipments/pumps as described in sub head II	Job	1	516198.38	516198.38
	Notes :-				
	Contractor shall include all electrical and mechanical items as required to operate the system automatically and also include in his rates any other components/tanks/ equipment/ etc. required to complete the job as required. Only main power supply with the earthing to be STP main control panel shall be provided by the owner through other agencies. The electrical panle will also include all the required NO/NC contacts, contactors etc. required to provide BMS connectivity.				
	Bypass arrangement shall be provided such that equalization tank pump can be used to pump out sewage to external manhole incase of maintenance of STP.				
288	*2nd year DLP*	L.S.	1	330367.00	330367.00
289	*3rd Year DLP*	L.S.	1	495550.00	495550.00
SIGNAGE	**SIGNAGE**				
290	Supply, fittings & fixing of Sigage work				
	Internal Signage				
A	**Directary (main) (1 set = 5 nos)**				
	Exterior Grade 3Mm ACP Router cut and fixed on Iron sq Pipe with anti rust coating with cut vinyl should be 3M / Avery. 900 x 1200 mm	Each	1	4720.00	4720.00
B	**Directary (Floor)**				
	Exterior Grade 3Mm ACP Router cut and fixed on Iron sq Pipe with anti rust coating with cut vinyl should be 3M / Avery. 900 x 1200 mm	Each	25	5310.00	132750.00
C	**Directional**				
	Made of Aluminium Extrusion 75 x 25 mm Each section with internal connector and side ap , Vinyl used 3M / avery hanging ieth s.s fittings 1200 x 300 mm	Each	50	1770.00	88500.00
D	**Departmental**				
	Exterior Grade 3Mm ACP Router cut with cut vinyl should be 3M / Avery make 1200 x 200 mm	Each	65	295.00	19175.00
E	**Room Identification**				
	Exterior Grade 3Mm ACP Router cut with cut vinyl should be 3M / Avery make 450 x 100 mm	Each	375	236.00	88500.00
F	**Service signage**				
	Exterior Grade 3Mm ACP Router cut with cut vinyl should be 3M / Avery make 450 x 100 mm	Each	98	236.00	23128.00
G	**Washroom**				
	Exterior Grade 3Mm ACP Router cut with cut vinyl should be 3M / Avery make 200 x 200 mm	Each	148	236.00	34928.00
H	**Bed No**				
	Exterior Grade 3Mm ACP Router cut with cut vinyl should be 3M / Avery make 150 mm dia	Each	300	177.00	53100.00
I	**Floor no (Staircase)**				
	Exterior Grade 3Mm ACP Router cut with Autoglow cut vinyl should be 3M / Avery make 200 x 200 mm	Each	30	295.00	8850.00
J	**Floor no (Lift Lby)**				
	Exterior Grade 3 Mm ACP Router cut with cut vinyl should be 3M / Avery make 200 x 200 mm	Each	30	236.00	7080.00
K	**Evacuation plan / with design creat**				
	Exterior Grade 3Mm ACP Router cut with Autoglow cut vinyl should be 3M / Avery make 450 x 300 mm	Each	30	708.00	21240.00
L	**Fire Exit**				
	Exterior Grade 3Mm ACP Router cut with Autoglow cut vinyl should be 3M / Avery make 450 x 150 mm	Each	50	590.00	29500.00
M	**Fire Exit directional**				
	Exterior Grade 3Mm ACP Router cut with Autoglow cut vinyl should be 3M / Avery make hanging with s.s fittings 450 x 150 mm	Each	30	590.00	17700.00
	External Sigange				
N	**Sigange on Rooftop or Mupty level**				
	Chanellium Signage letter : Made of Alumunium Chanel with Acrylic face and back Acp. All Acp cutting and channel bending through CNC opereated. Side profile paint and out side paint asper recommendation. Acp should be 3Mm outdoor quality and 6 mm A cast importated Acrylic with 3M/Avery Cut Vinyl. Light used for 1W (Approx) Moudle with outdoor Power supply and proper Electricals Wairing 18900 x 900 mm	Each	1	241500.00	241500.00
	Structural Cost Extra if it is required. Cost deppend on structural drawing as per individual Location				
O	**Building Signage on Facede**				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Exterior grade 3 mm white ACP Router cut and fixed on iron sq pipe with anti rust coating with 8 mm A cast importated Acryli and cit Vinyl should be 3 m / Avery. Light used for Philips Tube sets along with wireing. 6360 x 3360 mm	Each	1	16350.00	16350.00
P	**Directional**				
	40 mm x 40mm Ms pipe and 2mm Thick Ms plate with powder coated cut vinyl 3M / Avery pest, Stand should be grouts on floor with fastner 900 x 1500 mm	Each	4	7080.00	28320.00
Q	**Emergency**				
	Exterior grade 3 mm white ACP Router cut and fixed on iron sq pipe with anti rust coating with cut vinyl should be 3M / avery. Light used for philips tube sets along with wireing 3000 x 765 mm	Each	1	11800.00	11800.00
R	**Parking**				
	Exterior grade 4 mm white ACP Router cut round shape fixed on Ms stricture 25 x 25 mm and 50 x 50 mm Ms stand with Foundation , Vinyl should be used Honnycom Retroreflective 3M/Avery make 600 x 1800 mm	Each	2	5900.00	11800.00
	ELECTRICAL WORK				
	ELECTRICAL WORKS				
291	**11 KV HT VCB**				
	Supply & Delivery of three(3) panels (one incoming & two outgoing) cubicle type indoor, floor mounted, metal clad totally enclosed extensible on either side horizontal drawout type 11 KV vaccum circuit breaker having breaking capacity of (25 KA) for incoming & outgoing at 11 KV with electrical antipumping feature conforming to the enclosed specification and as described below:				
	INCOMER				
	1 No. 800 Amp 11 KV, 25 KA, VCB unit including all necessary interconnections, announciators, MCBs for control supply, panel illumination lamp, limit switch, power pack, toggle switch, heater, Disconnector type TB, TB, earth bus bar,door limit switch, protective relay etc. complete in all respects. The panel should have the provision for Rear HT cable terminaton with the following items.				
	1 set (3 nos.) 200/5A dual core type CTs, CL-5P20 for protection and CL-1.0 for metering with 15 VA burden each.				
	1 set Digital Ammeter (0-200A) with selector switch.				
	1 set (3 nos.) epoxy resin cast dry type draw out bus PT 11 /√3/.110/√3/.110/√3 KV, CL-1, 50 VA burden with HRC fuses at primary and secondary for protection.				
	1 no. Digital Multifunction meter with RS 485 port				
	9 KV surge arrester				
	1 set master trip realy(86).				
	Numeric 2-Over Current & 1-Earth fault, Over Voltage fault IDMT Relay				
	Single phase power pack with battery back up				
	Trip circuit supervision (74)				
	1 set Voltmeter (1-12 KV) with selector switch and protection HRC fuses.				
	1 No. TNC Switch for electrical closing & tripping.				
	1 set Earting terminals.				
	1 set 1x50x10 sq.mm., 11 KV, 25 KA for 3 sec., TP copper busbar with epoxy insulation.				
	8 window annunciator				
	LED type Indication lamp:				
	OFF (Green)				
	ON(Red)				
	Spring charge(Blue)				
	Trip Circuit(White) healthy				
	Trip(Amber)				
	CB test position				
	Phase Indication lamps (R,Y,B)				
	Hooter/Buzzer				
	DC Fail				
	AC Fail				
	OUTGOING				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Two(2) nos. 800 Amp, 11 KV, 25 KA, VCB unit with items for each VCB having the same equipments mentioned in the incomer breaker panel including all necessary interconnections, announciators, MCBs for control supply, panel illumination lamp, limit switch, power pack, toggle switch, heater, Disconnector type TB, TB, earth bus bar,door limit switch, protective relay etc. complete in all respects. The panel should have the provision for Rear HT cable terminaton with the following items.				
	2 set (6 nos.) 75/5A dual core type CTs, CL-5P20 for protection and CL-1.0 for metering with 15 VA burden each.				
	2set Digital Ammeter (0-100A) with selector switch.				
	2 set (6 nos.) epoxy resin cast dry type draw out bus PT 11 /√3/.110/√3/.110/√3 KV, CL-1, 50 VA burden with HRC fuses at primary and secondary for protection.				
	2 no. Digital Multifunction meter with RS 485 port				
	2 Set Single phase power pack with battery back up				
	2 set Numeric 2 Over Current & 1 Earth fault IDMT Relay				
	2 set master trip realy(86).				
	2 Set 3-Element Aux Relay (WTI) Trip/Alarm				
	2 set Trip circuit supervision (74)				
	2 set Voltmeter (1-12 KV) with selector switch and protection HRC fuses.				
	2 No. TNC Switch for electrical closing & tripping.				
	2 set Earting terminals.				
	2 set 1x50x10 sq.mm., 11 KV, 25 KA for 3 sec., TP copper busbar with epoxy insulation.				
	2 set of 12 window annunciator				
	LED type Indication lamp(2 set):				
	OFF (Green)				
	ON(Red)				
	Spring charge(Blue)				
	Trip Circuit(White) healthy				
	Trip(Amber)				
	CB test position				
	Phase Indication lamps (R,Y,B)				
	The HT panel shall be installed at the HT panel room of substation building. Complete set as mentioned above. Make: Siemens/L&T/Schnider/ABB (OEM make only)				
		unit	1.00	1945000.00	1945000.00
292	**Erection of H.T Panel**				0.00
	Installatation, Testing, commissioning and obtaining No objection Certificate from the Directorate of Electricity, Govt. of West bengal of the following switch board panel(s) including making/supply necessary CC foudation, mounting channels etc. and fixing the panel(s) on the foundation and mounting channel after proper alignment with foundation bolts,nuts,levelling testing and commissioning including cutting necessary chases, on floor and mending good damages, earthing, painting etc as required as per specification. The above panel shall be installed in the HT Switchgear Room of the substation building.	Unit	3.00	45000.00	135000.00
					0.00
293	Supply of new CPCB-II Compliant 3 phase, 415V, 50 HZ, 500 KVA Silent Diesel Generator Set comprising of Engine, Alternator, STD panel, DG controller, Base frame, internal Fuel tank, Battery, CPCB approved acoustic enclosure. Engine should not derate at 50 deg c ambient temperature. Make: Jackson/Sterling Powergen/Captiva				0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Engine: Number of cylinders - 4/6, of Gross Output not less than 587 BHP / Gross Engine Power , Engine Speed 1500 RPM, Aspiration Turbocharged, aftercooled, Combustion System Direct Injection, Cooling System Water cooled, Starting System Electric (24V DC), Fuel System Direct Fuel Injection System, Type of Injection - Electronic, Fuel Injector - Electronic, Fuel Filter Lube Oil Filter, Air Filter , Governor Electronic, Engine Protection LLOP, couple to 500 kVA 415 V alternator mounted on a base frame, etc.				0.00
	Governing class G3 as ISO 8528, completly electronic unit injector				0.00
	Panel : Operation - Isolator Panel (Manually Operated), Synchronization Controller, SMPS Type Battery Charger Constructional Feature - MS Sheet enclosure of 2mm thickness, Mounted Inside Acoustic Enclosure , Glass door on Acoustic Enclosure In front of Panel Display Section - Microprocessor Based Genset Controller • Engine Parameters: Engine Speed Lube Oil pressure Coolant temperature Engine Running Hour Battery voltage Running status Fuel level in Percentage Event Log • Electrical Parameters: Generator Voltage (Ph-Ph) Generator Voltage (Ph-N) Generator Current -(R,Y,B) Generator Apparent power (kVA) Generator Active power(kW) Generator Power Factor Generator Frequency (Hz) Control Supply Voltage • LED Indication Lamp Protections - High Water Temperature Low Lube Oil Pressure Low Fuel Level Overspeed				0.00
	Alternator : Rating in KVA 500 KVA, Rating in KW 400 KW, Current 740 Amps, Voltage 415 V, Phase / Wire 3 Phase / 4 Wire, Frequency 50 Hz, Speed 1500 RPM, Power Factor 0.8 (Lagging), Voltage Regulation + 1%, Efficiency 94.9%, Insulation Class Class 'H', Temperature Rise Limited to Class 'H', Enclosure IP 23, Excitation Brushless, Self Excited, Coupling Single Bearing, AVR R 450, Overload 10% overload for one hour at every 12 hours.				0.00
	BASE FRAME: Common MS Channel fabricated base frame, primer coated & painted, containing the engine and the alternator mounted through AVM Pads.				0.00
	Battery- As per manufacturer standard				0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Acoustic Enclosure: Salient Features - Approved by ARAI, the nodal agency of CPCB. • Low noise level <75 dB(A), at a distance of 1 Meter in free field conditions. • Insulation Material Rockwool • Most Compact size • In-housed 7 Tank Treatment of sheet material • Illumination arrangement • Ready-to-use silent DG Set, which eliminates need of grouting arrangements in foundation • Painted in In-housed paint house with weather-proof, powder-coated paint • Emergency Stop outside the Acoustic Enclosure. • Fuel Tank Capacity 990 liter, Inside Acoustic Enclosure, • Fuel Tank filling cap should be out side of the Canopy				0.00
	Isolator panel inside DG Set with suitable size of MCCB.	Unit	2	3286300.00	6572600.00
294	DG Installation				0.00
A	Supply & fixing of Alternator terminal box with aluminium busbar	Set	2	21240.00	42480.00
B	Supply & making of exhaust pipe line completed with 8 inch dia 5 mm thick m.s pipe,bend,flange,gasket etc	Mtrs.	30	4248.00	127440.00
C	Supply & fixing of M.S structure support for above pipe	Kg.	1500	129.80	194700.00
D	Supply & making of thermal insulation completed with 50mm thick mineral wool, aluminium cladding etc for above pipe	Mtrs.	15	1652.00	24780.00
E	Supply & making of thermal insulation completed with 50mm thick mineral wool.wire net and aluminium cladding etc for silencer box	Nos.	2	14160.00	28320.00
F	Installatation, Testing, commissioning and obtaining No objection Certificate from the Directorate of Electricity, Govt. of West bengal of the following DG sets including electrical connection to existing Main LT Panel, connection of Power and control cable, fixing the DG sets on the exinting foundation after proper alignment with foundation bolts,nuts, Programing and modification of main LT PLC as desired by engeering incharge of WBMSCL, etc. and mending good damages, earthing, painting etc as required as per specification. The above DG sets shall be installed in the DG yard beside substation building.	Sets	2.00	25000.00	50000.00
295					0.00
a	Testing and commissioning of existing Rising main	set	1.00	15000.00	15000.00
					0.00
b	Testing and commissioning of existing main LT panel including PLC programming as per matching with other installatation	set	1.00	50000.00	50000.00
					0.00
296	Testing and commissioning of 11/.433 kVA, 500kVA Oil type Transformers with Oil filtration & oil top up(from existing oil drum supplied at site), Testing commissioning of RTCC panel, radiator air release gasket replacement, BDV test, lR Value check, tightness of HT & LT cable, Alarm& tripping test by buchhqlz and oil surge reley etc. and obtaing no objection certificate from Directorate of Electricity, Govt. of West Bengal.	unit	2.00	40000.00	80000.00
					0.00
297.a	Supplying, laying, testing and commissioning of 11 KV 3Cx300 SQ.MM. earthed grade, stranded Al conductor, XLPE insulated, extruded PVC inner sheathed, armoured cable. The cables shall conform to IS 7098 Part-II (latest edition).The scope of work for laying includes - 1. Laying of cable in 'Masonary Trench' as per relevant standard and practice /norms. 2. Covering the cable trenches with RCC slab / chequired plate (with necessary fabrication) 3. Testing of HT cable as per relevant standard and practice /norms of Directorate of Electricty, Govt. of West Bengal 4.Supply and filling of trench (after laying) with dry sand. 5. Minor civil work as required.	RM	90	1578.00	142020.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
b	Supply Installatation testing and commissioning of end termination and connection with dressing, clamping etc. of 3C x 300 Sq. mm. 11 KV Gr. XLPE Cable, with heat shrink M-Seal end termination Kit, including supply of End termination kit along with all required materials.	Sets	6	9464.00	56784.00
					0.00
298	Supply of following 1.1 KV Grade XLPE/PVC insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				0.00
a	3.5 core x 300 sq.mm	RM	1350	1342.00	1811700.00
b	3.5 core x 240 sq.mm	RM	200	1135.00	227000.00
c	3.5 core x 185 sq.mm	RM	100	873.00	87300.00
d	3.5 core x 120 sq.mm	RM	1100	593.00	652300.00
e	3.5 core x 70 sq.mm	RM	250	388.00	97000.00
f	3.5 core x 50 sq.mm	RM	500	289.00	144500.00
g	4 core x 25 sq.mm	RM	250	196.00	49000.00
h	4 core x 10 sq.mm	RM	2000	128.00	256000.00
					0.00
299.a	Laying of one No. cable above 185 sqmm in underground trench460mm wide x 760mm average depth, with brick protection on the top of the cable with 8 (eight) Nos. bricks per Mtr. including filling the space between the bricks and cable and also the trenchwith shifted soil, leveling up and restoring surface duly rammed.	RM	1830	217.88	398721.19
b	Laying of one No. cable above 35 sqmm and upto 185 sqmm in underground trench 460mm wide x 760mm average depth, with brick protection on the top of the cable with 8 (eight) Nos. bricks per Mtr. including filling the space between the bricks and cable and also the trenchwith shifted soil, leveling up and restoring surface duly rammed.	RM	2858	200.40	572752.89
c	Laying of one No. cable upto 35 sqmm in underground trench 460 mm wide x 760 mm average depth, with brick protection on the top of the cable with 8 (eight) Nos. bricks per metre, including filling the space between the brick & cable and also the trench with shifted soil, leveling up and restoring surface duly rammed	RM	3217	188.75	607215.29
					0.00
300	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below :				0.00
a	4CX10 sqmm	Nos	120	153.80	18455.75
b	4CX25 sqmm	Nos	40	188.75	7550.08
c	3.5CX50 sqmm	Nos	16	229.53	3672.51
d	3.5CX70 sqmm	Nos	16	247.01	3952.14
e	3.5CX120 sqmm	Nos	12	319.25	3830.97
f	3.5CX185 sqmm	Nos	12	460.23	5522.74
g	3.5CX240 sqmm	Nos	16	501.01	8016.14
h	3.5CX300 sqmm	Nos	36	602.38	21685.51
					0.00
301	Finishing of the XLPE/PVC insulated armoured cable ends by soldering with cable sockets and insulated tapes etc., including supplying sockets, soldering materials, tapes etc. and making connection to switch, BDB and BBC etc.				0.00
a	4CX10 sqmm	Nos	120	78.06	9367.69
b	4CX25 sqmm	Nos	40	128.16	5126.60
c	3.5CX50 sqmm	Nos	16	243.51	3896.21
d	3.5CX70 sqmm	Nos	16	306.43	4902.89
e	3.5CX120 sqmm	Nos	12	443.92	5327.00
f	3.5CX185 sqmm	Nos	12	636.16	7633.97
g	3.5CX240 sqmm	Nos	16	828.41	13254.59
h	3.5CX300 sqmm	Nos	36	1027.65	36995.40
					0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
302	Supply & laying, dressing, clamping, testing and commissioning of 1.1 KV grade, stranded copper conductor, PVC insulated , extruded PVC inner sheathed, Galvanized wire/strip armoured and PVC outer sheathed LT control cable confirming to IS 1554 (Part-1) and of following sizes. The cables shall be laid on wall/ceiling/duct/masonary trench/tray as per site condition. The scope excluded fabrication and erection of cable tray but includes dressing & clamping of cables including supply of clamping materials and hardwares, covering the trenches with pre-cast(RCC) / pre-fabricated (chequired plate) and to the satisfaction of engineering incharge				0.00
a	2C x1.5 Sq.mm.	RM	600	90.00	54000.00
b	4C x 1.5 Sq. mm.	RM	700	131.00	91700.00
c	10C x1.5 Sq.mm.	RM	300	283.00	84900.00
d	2C x 2.5 Sq.mm	RM	200	117.00	23400.00
e	4C x 2.5 Sq. mm.	RM	500	184.00	92000.00
f	4C x 4.0 Sq. mm.	RM	600	250.00	150000.00
					0.00
303	Supply & Fixing of perforated GI cable tray with perforation not more than 17.5% suspended from ceiling incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support. With 25x25x3mm angle iron support				0.00
a	200x50x1.25mm (18SWG)	Each	100	334.39	33439.40
b	300x50x1.25mm (18SWG)	Each	400	427.60	171041.96
304	Supply & Fixing of perforated GI cable tray bend with perforation not more than 17.5% suspended from ceiling with two nos. suspenders & 25x25x3mm angle iron for supporting the cross member incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support.				0.00
a	200x50x1.25mm (18SWG)	Each	20	523.15	10462.92
b	300x50x1.25mm (18SWG)	Each	20	707.24	14144.75
305	Supply & Fixing of perforated GI cable tray tee with perforation not more than 17.5% suspended from ceiling with two nos. suspenders & 25x25x3mm angle iron for supporting the cross member incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support.				0.00
a	200x50x1.25mm (18SWG)	Each	20	709.57	14191.36
b	300x50x1.25mm (18SWG)	Each	20	979.88	19597.59
306	Supply & Fixing of perforated GI cable tray cross member with perforation not more than 17.5% suspended from ceiling with two nos. suspenders & 25x25x3mm angle iron for supporting the cross member incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support.				0.00
a	200x50x1.25mm (18SWG)	Each	10	939.10	9391.00
b	300x50x1.25mm (18SWG)	Each	10	1296.80	12967.96
307	Supply & Fixing of perforated GI cable tray reducer with perforation not more than 17.5% suspended from ceiling with two nos. suspenders & 25x25x3mm angle iron for supporting the reducer incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support.				0.00
a	200x50x1.25mm (18SWG)	Each	10	429.94	4299.35
b	300x50x1.25mm (18SWG)	Each	10	569.75	5697.52
308	**Soil Excavation :**				0.00
	Excavation of soil for installation of Earth Electrode and filling & ramming				0.00
	For Morrum Soil	Cu mtr.	350	333.23	116630.11
309	**Earthing Installation by GI pipe – (For Sub-station Neutral/Equipment earthing) :**				0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
a	Earthing with 80 mm dia GI pipe (TATA-Medium)x 3.0 Mts. long and 1 No. 65 mm x 8 mm galvanized (Hot Dip) steel strip (4 Mts. long), 20 mm dia x 125 mm long galvanized bolt, double nuts, double washers including finishing both ends by making holes etc. and S & F 80 mm dia GI pipe (ISI-Medium) protection (3 Mts. long) to be filled with bitumen partly under the ground level and partly above ground level to an average depth of 3.65 Mts	Set	28	6232.31	174504.75
b	Earthing with Copper plate (610x610x3mm size) having weight of 9.84 Kg and 1 No. 25x5mm Copper strip (3.20 mt long) & 1 no. 6 sqmm PVC insulated stranded Copper wire (4 Mt long) incl. S & F 15 mm dia GI pipe (ISI-Medium) protection (4 mt. long) to be fillied with bitumen, partly under the ground level & partly above ground level to an average depth of 3.65 Mts. below the ground level and restoring the surface duly rammed incl. providing 3.0 mt long, 25 mm dia GI pipe (ISI-Medium) for periodic treatment, incl. providing masonery enclosure on the top of the earth electrode of overall size 86.36x86.36x46cm deep (below Ground level) complete with cemented brick work (1:6) of 25 cm width, duly plastered with cement morter (inside) CI hinged inspection cover of size 36.56x35.56cm with locking arrangement, GI reducer and treatment of soil by using salt & charcoal or coke for plate electrode	Set	15	12194.31	182914.70
c	Extra for providing masonery enclosure on the top of the earth electrode of overall size 86.36 cm x 86.36 cm x 46 cm deep (below Ground level) complete with cemented brick work(1:6) of 25 cm width duly plastered with cement morter (inside) CI hinged inspection cover of size 36.56 cm x 35.56 cm with locking arrangement, GI reducer including drilling of 46 nos. 12 mm dia holes on the GI pipe	Item	43	1066.10	45842.28
d	Extra for treatment of soil by using salt & charcoal or coke for plate electrode	Item	43	618.69	26603.55
e	Connecting the equipments body to earth busbar incl. S & F 50 mm x 6 mm. Copper earth strip with PVC/ Heat Shrinkable sleeve' on wall/ underground etc., including clamping for neutral earthing.	Rmt.	150	1754.00	263100.00
f	Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat 25 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with GI bolts, nuts, washers, spacing insulators etc. as required	Mtr	500	181.76	90880.61
g	Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat 50 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with GI bolts, nuts, washers, spacing insulators etc. as required	Mtr	1200	251.67	302003.25
h	Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat 65 mm x 8 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with GI bolts, nuts, washers, spacing insulators etc. as required	Mtr	200	368.18	73636.60
310	Earth Continuity Conductor :				0.00
	Connecting the equipments to earth busbar including S & F GI (Hot Dip) wire of size as below on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages				0.00
a	No. 4 SWG	Mtr	1000	20.97	20972.45
b	No. 6 SWG	Mtr	500	15.15	7573.38
c	No. 10 SWG	Mtr	500	6.99	3495.41
					0.00
311	**Street light**				0.00
a	Supply & delivery/ of 7.0 Mt. G. I. Octagonal pole 3.00 mm thick with 260x260x16mm base plate and foundation accessories with 1.5 meter long single arm bracket (Make: Bajaj/Valmount.//Utkarsh/Surya) Manufacturer's test certificate to be submitted at the time of delivery.	Nos.	30	19601.07	588032.10

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
b	Supply & delivery wall mounted 1.5 meter long single arm bracket (Make: Bajaj/Valmount.//Utkarsh/Surya) Manufacturer's test certificate to be submitted at the time of delivery.	Nos.	30	1045.00	31350.00
c	Erection of G. I. Octagonal poles 7 m including making C.C. foundation as per drawing & design enclosed including earth work in excavation of foundation pit, making R.C.C. foundation, and also Including supply foundation, and also Including supply of all materials e.g. cable entry pipes, anchoring bolts and nuts, washers, sand, cement, coarse aggregate, reinforcement rods etc. and refilling of pit, duly rammed and finished complete as per direction of and up to the satisfaction of E.I.C.	Set	30	3303.16	99094.82
d	Extra on items for providing CC (6:3:1) base block (around the pole) dimension 0.60x0.60x0.76 mt. above ground level, neatly cemented finish (3 mm thick), at the base pole (in lieu of CC muffing) suitable for alkathene/ polythene pipe entry as directed for street light wiring, incl. S & F 25cmx25cmx10cm GI Loop box, 16SWG & incl. drilled hole in pole	Item	30	1543.81	46314.16
312	Painting of Steel Tubular Pole of lengths and no. of coats of paint, as given below with ready mixed paint/primer of approved make, and brand incl. preparation of surface by sand paper/emery paper, cleaning etc. for receiving fresh coat of paint				0.00
	Upto 9.0 mtr. long pole				0.00
a	One coat of red lead/Zinc chromate priming	Per pole	30	228.37	6851.00
b	1st coat of aluminium paint over 1 coat of RO priming	Per pole	30	174.77	5243.11
c	2nd coat of aluminium paint over 1st coat	Per pole	30	159.62	4788.71
313	Painting Block Letters or Digits within a circle/square as required, with "Black Japan" paint of approved make & brand, the size of letters and digits as given below				0.00
a	Size:- 40 mm and upto 50 mm	Each	2000	13.98	27963.26
b	Size:- 50 mm and upto 75 mm	Each	500	15.15	7573.38
314	Double Door Timer DB with I/C-63 A FP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-1no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/Legrand	set	4	15675.00	62700.00
					0.00
315	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection Make: L&T				0.00
a	40 A, TPN	Nos	81	2132.20	172708.11
b	6-32 A, SP	Nos	1050	221.38	232444.63
c	6-32 A A TPN	Nos	66	1393.50	91971.18
d	63A TPN	Nos	4	2132.20	8528.80
e	6-32 A TP	Nos	48	636.16	30535.88
316	Supplying and fixing 240 V RCCB, with ISI mark as per IS 12640-1 Integrated label holder, sliding bottom clam,sliding bottom clamp, IP 20, 35 sqmm termital, sliding sutters on din rail of existing DBs and necessary connection Make: L&T				0.00
	25 A, DP, 30mA	Nos	123	2747.00	337881.00
317	Supplying and fixing 415 V Four Pole MCCB of Breaking capacity 25kA/35kA with fixed thermal and fixed magnetic / adjustable thermal and fixed magnetic setting in existing DBs / enclosure and necessary connection Make: L&T				0.00
a	160 A	Nos	5	11370.56	56852.81
b	250 A	Nos	5	21538.70	107693.52

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
318	Supplying and fixing double door Horizontal TPN MCB Distribution board with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment Make: L&T				0.00
	4 way Enclosure	Nos	6	3321.80	19930.82
319	Supplying and fixing double-door SPN MCB Distribution Board with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment. Make: L&T				0.00
	2+4 way Enclosure	Nos	10	1381.85	13818.51
320	Distn. wiring in 22/0.3 (1.5 sqmm) single core stranded 'FRLS' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) in 19 mm bore, 3 mm thick polythen pipe (for horizontal & vertical run in wall and celing portion through prelaid polythen pipe) complete with all accessories embedded in wall to light/fan/call bell points with Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate flushed in wall incl. mending good damages to original finish Make: Havells/KEI/Gloster/Polycab				0.00
	2x22/0.3 (Ph. & N) and 1x22/0.3 as ECC				0.00
a	Average run 6 mtr	Point	700	1012.97	709078.47
b	Average run 7 mtr	Point	900	1135.31	1021777.67
c	Average run 8 mtr	Point	600	1256.42	753854.64
d	Average run 9 mtr	Point	400	1378.76	551505.47
e	Average run 10 mtr	Point	125	1501.10	187637.87
f	Average run 11 mtr	Point	125	1622.22	202777.36
g	Average run 12 mtr	Point	250	1744.56	436139.53
h	On board	Point	300	304.62	91387.44
321	Cutting channel of 40 mm x 40 mm size on masonry wall incl. S&F heavy gauge polythene pipe dia as stated below, by means of iron hooks and supplying and drawing 18 SWG GI Wire as fish wire incl. mending good damages to building works Make: Polycab/Ancher/AKG/BEC/Ramcon				0.00
	19 mm dia 3 mm thick polythene pipe without earth continuity wire	Rm	4000	101.37	405467.33
322	Cutting channel of 43 mm x 43 mm size on masonry wall incl. S&F heavy gauge polythene pipe dia as stated below, by means of iron hooks and supplying and drawing 18 SWG GI Wire as fish wire incl. mending good damages to building works				0.00
	25 mm dia 3 mm thick polythene pipe without earth continuity wire	Rm	1500	129.33	193995.14
323	Supplying and fixing polythene pipe complete with fittings as necy. under ceiling/beam, bound with 22 SWG GI binding wire incl. supplying and drawing 1x18 SWG GI Wire as fish wire inside the pipes and fittings and providing 50 mm dia disc of MS sheet (20 SWG) having colour paint at one face fastened at the load point end of the polythene pipe with fish wire (synchronizing with roof/beam casting work of building construction)				0.00
a	19mm dia 3mm thick Polythene Pipe	Rm	1500	41.94	62917.34
b	25mm dia 3mm thick Polythene Pipe	Rm	800	57.09	45673.33
c	32mm dia 3mm thick Polythene Pipe	Rm	500	61.75	30876.10
					0.00
324	Supplying and fixing PVC Rigid Conduit 'FRLSH' [Precision Make] on wall, ceiling with saddles and other accessories as required and mending good damages to building works Make: Polycab/Ancher/AKG/BEC/Ramcon				0.00
a	20mm size	Rm	4000	59.42	237687.74
b	25mm size	Rm	2700	80.39	217064.84
					0.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
325	Supplying and Drawing 1.1 KV single core stranded 'FRLSH' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) of the following sizes in the prelaid polythene pipe and by the prelaid GI fish wire and making necy. connection as required. Make: Polycab/Ancher/AKG/BEC/Ramcon				0.00
a	3 x 22/0.3 (1.5 sqmm)	Rm	5000	58.72	293614.27
b	2x36/0.3 (2.5 sqmm) + 1x22/0.3 (1.5 sqmm) as ECC	Rm	8000	79.52	636164.26
c	2x56/0.3 (4 sqmm) + 1x36/0.3 (2.5 sqmm) as ECC	Rm	800	116.22	92977.85
d	3x84/0.3 (6 sqmm) + 2x56/0.3 (4 sqmm) as ECC	Rm	600	276.49	165892.06
e	3x80/0.4 (10 sqmm) + 2x84/0.3 (6 sqmm) as ECC	Rm	600	485.69	291412.16
326	Supply & Fixing 240 V, 25 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch with 2 Module GI Modular type switch board with top cover plate flushed in wall and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Nos	50	411.29	20564.65
327	Supply & Fixing 240 V, 25A Modular starter (Brand approved by EIC) on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Nos	50	357.70	17884.84
328	Supplying & Fixing GI Modular Switch Board of the following sizes complete with top cover plate flushed in wall for housing the board after cutting the brick wall incl. making earthing attachment, painting and mending good damages to building works Make: Anchor/Cabtree/Legrand				0.00
	2 Module		50	200.40	10020.17
329	Supplying & Fixing GI Modular Switch Board of the following sizes complete with three no. suitable size Copper bar with holes (for Ph, N & E) fixed on bakelite/Hard Rubber insulator over the MS welded chairs incl. top cover flushed in wall for housing the board after cutting the brick wall incl. making earthing attachment, painting and mending good damages to building works. Make: Anchor/Cabtree/Legrand				0.00
a	4 Module	Nos	500	304.10	152050.25
b	6 Module	Nos	1000	386.83	386825.15
c	8 Module	Nos	50	473.05	23652.26
d	2 Row 12 Module	Nos	50	732.87	36643.53
330.a	Supply & Fixing 240 V 6 A Modular type switch (Brand approved by EIC) on existing GI Modular type switch board having top cover plate and making necessary connections as required Make: Anchor/Cabtree/Legrand	Each	900	95.54	85987.04
b	Supply & Fixing 240 V 16 A Moduler type switch (Brand approved by EIC) on GI Modular type switch board having top cover plate and making necessary connections as required. Make: Anchor/Cabtree/Legrand	Each	900	138.65	124786.07
c	Supply & Fixing 240 V, 6A, 5 pin Modular type plug socket (Brand approved by EIC), without switch & plug top, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Each	605	139.82	84588.87
d	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Each	350	188.75	66063.21

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
e	Supply & Fixing 240 V, 25 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Each	50	227.20	11360.08
f	Supply & Fixing 240 V, 4 nos. 16 A, 3 pin Modular type plug socket with 4 nos. 16A Modular type switch (Brand approved by EIC), 20A Modular switch type SP MCB (C-Curve) and Indicator without plug top on 2 row 18 Module GI Modular type switch board with 2 row 18 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Each	50	2338.43	116921.40
g	Supply & Fixing 240 V, 25 A, 3 pin Modular type plug socket with 20/25A Modular switch (Brand approved by EIC) type SP MCB (C-Curve) and 4 Module GI Modular type switch board with 4 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. Make: Anchor/Cabtree/Legrand	Each	50	623.35	31167.39
h	Supplying & Fixing Industrial Plug & Socket board with 415 V, 30A, TPN & Earth Metal Industrial Plug socket & 30A Industrial top incl. S&F 32 A TPN/FP MCB breaking capcity 10kA (C- Curve) in SS enclosure fixed on wall and cecessary conection. Make: Anchor/Cabtree/Legrand	Each	50	3108.58	155429.14
i	Supplying & Fixing Industrial Plug & Socket board with 240 V, 20A,SPN & Earth Metal Industrial Plug socket & 20A Industrial top incl. S&F 20 A SP MCB breaking capcity 10kA (C- Curve) in SS enclosure fixed on wall and cecessary conection. Make: Anchor/Cabtree/Legrand	Each	40	1053.28	42131.32
j	Supplying & Fixing 240 V AC/DC superior type Ding-Dong Call Bell (Anchor) on HW board incl. S&F HW board	Each	40	201.57	8062.74
k	Supply & Fixing 240V, Modular Socket (2 Module) type fan regulator (Step type) (Brand approved by EIC) on existing Modular GI switch board with top cover plate incl. making necy. connections etc. Make: Anchor/Cabtree/Legrand	Each	340	450.91	153308.59
					0.00
331	Supply and fixing of Fitting & Fixtures including test certificates, Warranty & uarranty.				0.00
a	2' X 2' Recess mounted LED LUMINAIRES - 36W. Make:-(Havels: , Cat No.: Venus NEO HE /Similar Philips/ Similar Crompton)	Each	230	3,210.48	738410.40
b	Surface mounting 2'x2' flat LED light- 34W. Make:-(Havels: , Cat No.: Pluto surface PLS /Similar Philips/ Similar Crompton)	Each	150	4,427.64	664146.00
c	GREEN LED BATON - 1X22W. Make:-(Havels: , Cat No.: Regal batten up to 22W/Similar Philips/ Similar Crompton)	Each	610	295.47	180236.70
d	GREEN LED BATON - 2X22W. Make:-(Havels: , Cat No.: Regal batten up to 22W/Similar Philips/ Similar Crompton)	Each	250	595.35	148837.50
e	LED Tube light 18W Make:-(Havels: , Cat No.: Photon ultra E2 TL 18 W/Similar Philips/ Similar Crompton)	Each	1110	467.46	518880.60
f	Surface Mounted Round Shaped LED - 18W. Make:-(Havels: , Cat No.: Endura NEO HE surface 18W /Similar Philips/ Similar Crompton)	Each	150	1,852.20	277830.00
g	Recess Mounted Round Shaped LED - 15W. Make:-(Havels: , Cat No.: Integra NEO DLR 15W /Similar Philips/ Similar Crompton)	Each	250	996.66	249165.00
h	LED STREET LIGHT-90 W Make:-(Havels: , Cat No.: Endura Pearl plus/Similar Philips/ Similar Crompton)	Each	30	8,158.50	244755.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
i	Surface pendent LED light 25 W Make:-(Havels: , Cat No.: Cylendro Pro /Similar Philips/ Similar Crompton)	Each	10	3,880.80	38808.00
j	LED landscape light 8 W Make:-(Havels: , Cat No.: Bamboo BL /Similar Philips/ Similar Crompton)	Each	20	4,586.40	91728.00
k	LED flood light 70 W Make:-(Havels: , Cat No.: Jeta Pro 70 /Similar Philips/ Similar Crompton)	Each	16	6,615.00	105840.00
l	Decorative outdoor type Hexagonal Bulk head Back Lit LED 10 W Make:-(Havels: , Cat No.: HEXA FT 10W /Similar Philips/ Similar Crompton)	Each	100	1,234.80	123480.00
m	Decorative spike light COB LED luminaries with wall mounting Make:-(Havels: , Cat No.: Lycus /Similar Philips/ Similar Crompton)	Each	10	4,851.00	48510.00
					0.00
332.a	Providing double ball bearing capacitor start 1400/1200 mm(48inch) sweep AC ceiling fan of approved make complete with out regulator and other accessories as required as per recommended makes enclosed.(Make: Crompton/Usha/Havells)	Each	320	2,500.00	800000.00
b	Providing double ball bearing capacitor start 900 mm(35inch) sweep AC ceiling fan of approved make complete with out regulator and other accessories as required as per recommended makes enclosed.(Make: Crompton/Usha/Havells)	Each	20	2,200.00	44000.00
c	Supply of Heavy duty 300 mm dia exhaust fan(Make: Crompton/Usha/Havells) with mounting ring & louver.	Each	110	2,638.12	290193.20
d	Supply & Fixing 400mm(16") sweep cabin fan on wall/ceiling by S&F rag bolts,nuts & washers(6mm dia x 62mm long) or as required including S&F 24/0.20 PVC insulated flexible copper wire 0.5 mt. length.(Make: Crompton/Usha/Havells)	Each	50	2,984.55	149227.50
e	Fixing only celling fan complete with blades,canopy,fork,rubber bush etc. incl. S&F connection wire for down rod upto 30 cm incl. painting the rod with approved paint and making necessory connection as required by	Nos.	340	76.90	26145.65
f	Fixing only exhaust fan after making hole in wall and making good damages and smooth cement finish etc. as practicable as possible and providing necy. length of PVC insulated wire and making connection for exhaust of following diameter:				0.00
	30 cm	Nos.	110	383.33	42166.27
g	Supply & Fixing 240 V, 6A, 5 pin Modular type plug socket (Brand approved by EIC), without switch & plug top, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc. (Anchor/Cabtree/Legrand)	Nos.	50	139.82	6990.82
333	**Lightning Arrester :**				0.00
a	Supply, installation, testing and commissioning of CPRI tested Air terminal-Dynasphere (Control Streammer Emission Technology) with all accessories complete as required. Make: ABB/Truepower	Nos.	1	1,20,000.00	120000.00
b	Supply and installation of 50 mm dia 3 meter long G.I Mast with base plate and adapter. as required	Nos.	1	7,500.00	7500.00
c	Supply and installation of guy kit suitable for 5 mtr mast with W.R.Grips etc as required complete	Nos.	1	4,500.00	4500.00
d	Supply and installation of SS cable ties as required complete.	Set	1	1,000.00	1000.00
e	Supply and installation of 70 sq mm insulated copper cable as required complete.	RM	100	600.00	60000.00
f	Supply and installation of conductive saddles as required complete.	Nos	100	10.00	1000.00
g	Supply and installation of fixings for conductive saddles as required complete.	Nos	100	5.00	500.00
h	Supply and installation of lightning event counter as required complete.	No	1	25,000.00	25000.00
i	Supply and installation of 25mm x 6mm copper strip as required complete.	Metre	30	816.00	24480.00
j	Supply and installation of copper bonded Earth rod 2000mmx5/8" dia as required complete.	Nos	4	1,800.00	7200.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
k	Supply and installation of earth rod clamp as required complete.	Nos	4	850.00	3400.00
l	Supply and installation of Ground Enhancement Material (GEM) Each Bag of 11.3 k.g as required complete.	Nos	8	2,250.00	18000.00
m	Supply and installation of lower termination kit as required complete.	Nos	1	3,000.00	3000.00
					0.00
334.a	H.T. (11 KV)danger notice plate 15cm. x 10 cm. made of M.S sheet and vitreous enameled white on both sides and with inscription in signal red colour on front side as required.	Sets	10	151	1510.00
b	Medium voltage danger notice plate 15cm. x 10 cm. made of M.S sheet and vitreous enameled white on both sides and with inscription in signal red colour on front side as required.	Sets	20	136	2720.00
c	First aid box as approved St. John Ambulance / Fire Brigade / Indian Red Cross, confirming to IS 2217-1963.	Sets	1	1245	1245.00
d	24 gauge sheet steel round bottom fire bucket with sand of suitable capacity with fire red paint and written with white paint Fire and mounted on M.S angle Iron bracket of size 50mm. x 50mm. x 6mm. thick and 500mm. long, including grouting on wall etc. as required.	Nos.	8	927	7416.00
e	Shock treatment chart (in English, Hindi and local language) duly mounted on a wooden frame with glass as required.	Nos.	5	540	2700.00
f	Rubber matting 914.4 mm. wide, 15 mm. thick to withstand 11KV Di-Electric strength as per IS 5424-1969.	Nos.	15	2420	36300.00
g	Rubber hand gloves suitable for 11KV System in wooden box.	Nos.	2	440	880.00
h	S&F of Emergency Stop Push Button Switch in glass cover wooden box	Nos.	2	500	1000.00
					0.00
335.a	Supply, installation, testing & commissioing of Following rating UPS in paralleling mode at 0.99 input power factor with SNMP card, compatible for BMS connectivity on backnet/MODBUS, as per specification given in the document with following broad features. Make: Numeric/Fuji Electric/Schnider/Rielo Power				0.00
	THD(i) shall be less than 3% in the entire loading range.				0.00
	100 KVA isolation transformer				0.00
	Input power factor shall be more than 0.95. from 25% to 100% load.				0.00
	UPS shall carry design output at 40 deg.				0.00
	Shall have soft start and hold of for incoming supply.				0.00
	Invertor capability to supply 150% load for 5 sec.				0.00
	Three Phase Input and Three Phase Output. (Input - 340V - 470V, Three Phase, 4 wire. / Output - 400-415 Volt, Three Phase, 4 Wire.)				0.00
	Shall not allow deep discharge of the battery and shall not go to 10.5 volts in case of 12 volt cells.				0.00
	Battery shall be smf type with rack and suitable for 30 minute backup for individual ups on 100% load.				0.00
	UPS shall be compatible for minimum 2 nos unit in parallel operation. (Synchronize). Parallel operation kit shall be supplied with UPS.				0.00
	UPS warrenty- 3 years				0.00
	UPS make- Numeric/APC/Luminous				0.00
	100 KVA (KVA=KW) UPS				0.00
	Supply, Installatation, Testing Commissioning of 12V, 75AH, SMF, UPS Batteries, complete with DC interlink cable,				0.00
	Supply and installatation of Battery Rack sutable to hold 30 nos, 12V, 75 AH, SMF UPS batteries				0.00
	Battery warrenty- 3 Years				0.00
	Battery make- Exide/Quanta	Nos	1	2006000	2006000.00
336	**Elevator**				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Supply Installatation Testing and commissioning of Elevator for 1360 Kg Capacity, 1 m/s Speed & 5 Stops including obtaining of NOC from DOE, Govt of West Bengal- Technical Specifications are as follows- 1)Capacity- 20 Persons,1360 kg, 2) Speed- 1.00 m/s, 3)Stops & Openings- 05 Stops & 05 Openings, 4) Machine type & Location- Gearless machine located in the shaft on top of the guiderails, 5)Control-Duplex Collective Selective Control, 6)Drive- ACVVVF, 7)Power supply- 415 volts,3 phase, 50Hz, AC, 8)Car travel- 14800mm, 9)Car dimensions- 1300mm wide x 2400mm deep x 2300mm high, 10)Door opening-1200mm wide x 2100mm high, 11) Car door- 2 panel automatic side opening door with ACVF drive-in Stainless-steel Hairline finish, 12)Car design- Stainless-Steel Hairline finish, 13)Car suspended ceiling- Stainless Steel hairline finish with Square LED for car lighting, 14) Car flooring- 20mm Recess for Granite Flooring (Granite provide by Customer) , 15)Handrail- Round handrail in Stainless steel finish provided on 3 side, 16) Alarm button in car operating panel with battery back-up, 17)Axial fan in car for ventilation, 18)Braille on push buttons, 19) Infra-red screen for car door, 20) Phase failure and phase reversal protection, 21) Automatic rescue device in case of power failu,	Nos	2	1900400.00	3800800.00
337	Straigh through Jointing of cable of different size by compound jointing kit including S&F ferrul, tapes and jointing materials (Brand approved by EIC)				0.00
a	3½ / 4 core 10-16 sqmm cable	set	10	1216.40	12164.02
b	3½ / 4 core 25-35 sqmm cable	set	10	1381.85	13818.51
c	3½ / 4 core 50 sqmm cable	set	5	1724.40	8622.01
d	3½ / 4 core 70 sqmm cable	set	5	1764.02	8820.08
e	3½ / 4 core 120-150 sqmm cable	set	5	2492.23	12461.13
f	3½ / 4 core 185 sqmm cable	set	5	2778.85	13894.25
g	3½ / 4 core 240 sqmm cable	set	5	3361.42	16807.09
h	3½ / 4 core 300 sqmm cable	set	5	4090.79	20453.96
338	Supplying and fixing double door Vertical TPN MCB Distribution board for MCCB incomer with IP-42/43 protection, on angle iron frame on wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment				
	12 way	Nos.	10	17,044.77	170447.75
339	Supplying and fixing 415 V Four Pole,100A, MCCB of Breaking capacity 25kA/35kA with fixed thermal and fixed magnetic / adjustable thermal and fixed magnetic setting in existing DBs / enclosure and necessary connection.	Nos.	10	4,971.64	49716.35
340	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
i)	6-32-SP	Nos.	30	186.42	5592.65
ii)	6-32 A-TP	Nos	30	897.15	26914.64
341	Supply & Fixing 240 V,25 A, 3 pin Modular type plug top with indicator (Brand approved by EIC) & necy. Connections.	Nos.	50	150.30	7515.13
	HVAC System				
342	**Air Cooled Scroll Chiller (35TR)**				
	Supply, installation, testing & commissioning of modular type scroll type air cooled water chilling machine each having minimum cooling capacity of 35TR at 40 degC. Modules shall operate in master slave combination with automatic run time equalization between the modules. **Make - Daikin/Trane/Mitsubishi/York**				
	Nominal conditions:				
	Cooling: EWT & LWT shall be 12 & 7 Deg C. Minimum COP 3.35 at Nominal conditions				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Each module to have scroll compressor as per OEM design, complete with step capacity control etc, as per specifications.				
	Suitable Nos & suitable capacity squirrel cage induction motor with class 'F' insulation suitable for operation on 415 volts ±10% , 50 Hz, A.C. supply.				
	Suitable Nos. & suitable capacity starting arrangement as per OEM standard				
	Modular design chiller with the provision of added units as an when required.				
	First charge of R410 A refrigerant and oil duly charged at factory				
	1 No. - Matching Air Cooled condenser with copper tubes and aluminium fins and 2 speed fans for noise control.				
	1 No. - Matching Cooler of BPHE type.				
	1 Lot - Refrigerant piping fittings, valves, accessories to inter connect compressor, condenser, chiller and expansion valve.				
	Modbus communiation card with open protocol, with master slave combination for multiple units connected.				
	1 Set - Control panel with display comprising of Controls. It shall also be equipped with protection and monitoring devices such as H/L Pressure switch/ Thermal and Current Overload Protector				
	1 Lot - DP/ Flow switches at inlet and outlet of chiller, water drain & air purge valves, wherever required.				
	Lot- suction line and chiller insulation				
	Lot-frame work for mounting the above condenser, chiller, compressor and motor with base plate complete with antivibration pads/ springs.				
	Lot- Initial/ first charge of refrigerant gas & compressor oil duly charged at factory.				
	Air Cooled Scroll (35TR) - 5 Working	Nos.	3	1300000.00	3900000.00
343	**Water Circulation Pumps**				
	Supply, Installation & Commissioning of chilled water circulating pumps with Channel base with vibration isolators, coupling, coupling guard etc.				
	The pump **Make: Kirloskar/Cromption/Mather & Platt/ Willo**				
a	characteristic shall be as follows: Water flow rate: 225 USGPM Head : 35M Primary chilled water pumps as described above.	Nos (2W+1S)	3	90585.30	271755.90
	Hot Water Pump				
b	The pump characteristic shall be as follows: 35 USGPM Head = 30M Hot water pumps as described above. (1W+1S)	Nos	1	80134.40	80134.40
	Hot Water Pump				
c	The pump characteristic shall be as follows: 10 USGPM Head = 10M Hot water pumps as described above. (1W+1S)	Nos	1	64529.60	64529.60
	Hot Water Generator				
344	**Hot Water Generator**				
	Supply, installation, testing & commissioning of modular type IP 54 air to water scroll type hot water generator. Modules shall operate in master slave combination with automatic run time equalization between the modules. **Make - Chiller and Heat Pump make shall be same for easy maitenance purpose.**				
	Nominal conditions:				
	Maximum outlet water temerature 55 Deg C				

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
	Outdoor ambient air temperature 20°C DB / 15°C WB, Minimum COP 4.39 at above conditions The unit shall be capable of operation from -10 Deg C To 43 Deg C				
	Each module to have scroll compressor as per OEM design, complete with step capacity control etc, as per specifications.				
	Matching plate type heat exchanger and air cooled condenser with copper tube and aluminium fins as per OEM standard				
	Suitable Nos. & suitable capacity starting arrangement as per OEM standard				
	First charge of R410 A refrigerant and oil duly charged at factory				
	Refrigerant piping fittings, valves, accessories to inter connect compressor, condenser, chiller and expansion valve.				
	Control panel with display comprising of Controls. It shall also be equipped with protection and monitoring devices such as H/L Pressure switch/ Thermal and Current Overload Protector				
	DP/ Flow switches at inlet and outlet of chiller, water drain & air purge valves, wherever required.				
	Lot- suction line and chiller insulation				
	Lot-frame work for mounting the above condenser, chiller, compressor and motor with base plate complete with antivibration pads/ springs.				
	Lot- Initial/ first charge of refrigerant gas & compressor oil duly charged at factory.				
a	**Capacity 40KW**	No	1	495300.00	495300.00
b	**Capacity 30KW**	No	1	450000.00	450000.00
345	Double Skinned Floor Mounted Air Handling Units for Operation Theater Make: Edgetech/Zeco/Systamaire/ Waves				
a	2900 CFM, 8.35 TR , 125 MMWC	No	1	153208.90	153208.90
b	2750 CFM, 7.6TR, 125 MMWC	No	1	145284.10	145284.10
c	2600 CFM, 8.3TR , 125 MMWC	No	1	137359.30	137359.30
d	2700 CFM, 9.96TR, 125 MMWC	No	1	142642.50	142642.50
e	2650 CFM, 8.35TR, 125 MMWC	No	1	140000.90	140000.90
346	**Double Skinned Ceiling suspended Air Handling Units with Drain pump** **Make: Edgetech/Zeco/Systamaire/ Waves**				
a	2160 CFM, 4.6TR, 55MMWC	Nos	2	93366.00	186732.00
b	3200 CFM, 8TR, 55MMWC	Nos	2	138320.00	276640.00
c	1920 CFM, 4TR, 55MMWC	Nos	2	82992.00	165984.00
d	3300 CFM, 4.9TR, 55MMWC	No	1	142642.50	142642.50
e	1900 CFM, 3.3TR, 55MMWC	No	1	82127.50	82127.50
f	1700 CFM, 10TR (Treated Fresh Air Unit), 55MMWC	No	1	115472.50	115472.50
g	1470 CFM, 3.3TR, 55MMWC	Nos	2	63540.75	127081.50
h	2460 CFM, 6.5TR, 55MMWC	No	1	106333.50	106333.50
i	2460 CFM, 7.5TR, 55MMWC	No	1	106333.50	106333.50
j	960 CFM, 2.8TR, 55MMWC	No	1	41496.00	41496.00
347	**Supply, Installation & Commissioning of Fan Coil Units** **Make: Edgetech/Zeco/Systamaire/ Waves**				
a	1600 CFM, 4TR	Nos	6	59033.00	354198.00
b	1330 CFM, 3.5TR	Nos	5	49153.00	245765.00
c	1055 CFM, 2.5TR	Nos	2	40014.00	80028.00
d	835 CFM, 2TR	Nos	3	37420.50	112261.50
e	590 CFM, 1.5TR	Nos	8	31492.50	251940.00
f	447 CFM, 1.0TR	Nos	10	28405.00	284050.00
348	**Inline Fans** **Make: Kruger/Nicotra/Flaktwoods/Wolter/Systamaire**				
	Supply, Installation & Commissioning of Inline Fans for toilet exhaust.				
a	950 CFM (SP: 12 to 15 mmwc) _ (Inline/Cabinet Type)	Nos	7	22464.65	157252.55
b	900 CFM (SP: 12 to 15 mmwc) _ (Inline/ Cabinet Type)	Nos	3	22464.65	67393.95
c	450 CFM (SP: 12 to 15 mmwc)	Nos	3	17550.65	52651.95
d	400 CFM (SP: 12 to 15 mmwc)	No	1	17550.65	17550.65
e	150 CFM (SP: 12 to 15 mmwc)	No	1	17550.65	17550.65
f	150 CFM (SP: 8 to 10 mmwc)	Nos	3	17550.65	52651.95
g	100 CFM (SP: 12 to 15 mmwc)	No	1	17550.65	17550.65

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
h	100 CFM (SP: 8 to 10 mmwc)	Nos	2	17550.65	35101.30
349	**Propeller fan** **Make: Alsthom/Havells/Marathon**				
	Supply, Installation & Commissioninging of direct driven Propeller fan for exhaust air.				
a	100 CFM	Nos	24	3895.45	93490.80
b	900 CFM (Heavy duty Propeller Fan at Pr 8 - 10mm.)	Nos	6	15302.95	91817.70
c	1100 CFM (Cooking Preparation Area)	Nos	5	19383.65	96918.25
d	1600 CFM (Heavy duty Propeller Fan at Pr 8 - 10mm.)	Nos	4	29467.10	117868.40
	Direct driven centrifugal Fans				
e	1000 CFM (Static Pressure : 32 - 35 mm wg)	Nos	2	37050.00	74100.00
f	2000 CFM (Static Pressure : 32 - 35 mm wg)	No	1	49400.00	49400.00
350	**Dual Speed Smoke Extractor Fan with CO Sensor** **Make: Kruger/Nicotra/Flaktwoods/Wolter/Systamaire**				
	Supply, Installation & Commissioning of Dual Speed Smoke Extractor Fan of following capacities.				
a	2790 CFM @ 1st Speed and 5580 CFM @ 2nd Speed	Nos	9	62985.00	566865.00
b	3360 CFM @ 1st Speed and 6715 CFM @ 2nd Speed	Nos	2	77902.50	155805.00
c	2475 CFM @ 1st Speed and 4950 CFM @ 2nd Speed	Nos	2	62985.00	125970.00
351	**EXPANSION TANK**				
	Supply, Installation & Commissioning of following capacity insulated expansion tank fabricated from MS sheet				
	1000 ltrs.	No	1	107250.00	107250.00
352	**Chilled water piping with 32 mm Nitrile Rubber Insulation & 24 swg Aluminium Cladding**				
	PIPE SIZE (NB)				
a	150 mm	RM	102	2735.20	278990.40
b	100 mm	RM	77	1960.40	150950.80
c	80 mm	RM	72	1465.10	105487.20
d	65 mm	RM	170	1201.20	204204.00
e	50 mm	RM	106	934.05	99009.30
f	40 mm	RM	206	735.15	151440.90
g	32 mm	RM	160	551.85	88296.00
h	25 mm	RM	98	434.20	42551.60
i	20 mm	RM	160	392.60	62816.00
353	Pipe for Hot Water Generator				
	PIPE SIZE (NB)				
a	50 mm	RM	110	911.95	100314.50
b	40 mm	RM	64	712.40	45593.60
c	32 mm	RM	171	529.10	90476.10
d	25 mm	RM	56	411.45	23041.20
e	20 mm	RM	200	365.30	73060.00
354	Supply, Installation & Commissioning of Auto Air Purge Valve.	Nos	6	902.85	5417.10
355	**3-Way / 2-Way Modulating Valve** **Make: L&T/ ZOLOTO/Honeywell/ Siemens**				
(i)	Supply, Installation & Commissioning of 3-way modulating mixing valve & 2-way On-Off type control valve with actuator and room thermostat as per following sizes.				
a	40 mm dia - 3 Way Valve	Nos	7	19574.75	137023.25
b	32 mm dia - 3 Way Valve	Nos	9	17314.70	155832.30
c	25 mm dia - 3 Way Valve	Nos	3	5804.50	17413.50
d	20 mm dia - 3 Way Valve	Nos	18	5434.00	97812.00
e	32 mm dia - 2 Way Valve	Nos	6	14041.95	84251.70
f	25 mm dia - 2 Way Valve	Nos	8	5681.00	45448.00
g	20 mm dia - 2 Way Valve	Nos	21	5434.00	114114.00
(ii)	**Ball Valve With Strainer**				
a	32 mm dia	Nos	6	2470.00	14820.00
b	25 mm dia	Nos	8	1851.20	14809.60
c	20 mm dia	Nos	20	1543.75	30875.00
(iii)	**Ball Valves**				
a	40 mm dia	Nos	18	2531.75	45571.50
b	32 mm dia	Nos	18	1852.50	33345.00
c	25 mm dia	Nos	14	1233.70	17271.80
d	20 mm dia	Nos	56	926.25	51870.00
(iv)	**Blancing Valve**				
a	100 mm dia	Nos	4	18463.25	73853.00
b	80 mm dia	Nos	2	13418.60	26837.20

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
c	65 mm dia	Nos	2	10491.65	20983.30
d	50 mm dia	Nos	2	8089.25	16178.50
e	32 mm dia	Nos	2	6175.00	12350.00
(v)	**Non Return Valve**				
a	100 mm dia	Nos	3	7311.20	21933.60
b	50 mm dia	Nos	2	6422.00	12844.00
c	32 mm dia	Nos	2	5989.75	11979.50
(vi)	**Butterfly Valve**				
a	100 mm dia	Nos	14	4655.95	65183.30
b	80 mm dia	Nos	2	3791.45	7582.90
c	65 mm dia	Nos	2	3124.55	6249.10
d	50 mm dia	Nos	8	2679.95	21439.60
e	32 mm dia	Nos	8	2260.05	18080.40
356	**Temparature Gauge & Pressure Gauge** **Make: H.Guru/Warree/**				
a	Supply, Installation & Commissioning of Pressure Gauge(Range : 0 - 6 KG/Sqm).	Nos	64	1914.25	122512.00
b	Supply, Installation & Commissioning of Thermometer (dial type).	Nos	50	2840.50	142025.00
c	PID Control	Nos	43	6175.00	265525.00
357	**Flow Switch** **Make: ISI approved**				
	Supply, Installation & Commissioning & Installation of Flow Switch.	Nos	6	2161.25	12967.50
358	**Supply, Installation & Commissioning of Flexible Connector of following sizes.**				
a	100 mm dia	Nos	12	1062.10	12745.20
b	50 mm dia	Nos	4	617.50	2470.00
c	32 mm dia	Nos	4	444.60	1778.40
359	**DRAIN PIPING**				
	Supply, Installation & Commissioning of rigid PVC piping conforming to IS 4985				
a	40 mm dia	RM	50	221.00	11050.00
b	32 mm dia	RM	30	174.85	5245.50
c	25 mm dia	RM	306	140.40	42962.40
360	**GSS DUCTING**				
	Supply, Installation & Commissioning of GSS sheet metal of 120GSM rectangular ducting. GI Sheet: Tata/ Sail/ Jindal				
a	24 G	Sqm.	700	570.70	399490.00
b	22 G	Sqm.	100	683.80	68380.00
361	**Fresh Air Arrangement(Sterile Corridore,Burn Unit,ICU, Blood Bank,OPD Minor Surgery,Pre-operative,Recovery) @407 fm,225cfm,483cfm,343cfm,653cfm,104 cfm,166cfm,172cfm,**	Lot	1	531740.05	531740.05
362	**ALUMINIUM DUCTING** **GI sheet Make: Balco/ Jindal/Nalco**				
	Supply, Installation & Commissioning of aluminium ducts.				
a	22 Gauge	Sqm.	285	825.50	235267.50
b	24 Gauge	Sqm.	280	655.85	183638.00
c	Filter Plenum for OT	Nos.	5	6825.00	34125.00
d	Exhaust Air arrangement(OT1,OT2,Septic OT,Maternity OT,Burn unit,Minor OT,Mortuarry) @635cfm, 650cfm, 850cfm, 650cfm, 225cfm, 565cfm, 1700cfm	Lot	1	526086.35	526086.35
363	**FIRE DAMPERS** **Make: Ravister/ Air master/ Air flow**				
	Supply, Installation & Commissioning of fire dampers. The damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications.				
a	Fusible Link Type Fire Damper	Nos.	5	11050.00	55250.00
b	Motorised Fire Damper with Actuator & control panel	Nos.	5	23481.25	117406.25

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
364	**VOLUME CONTROL DAMPERS** **Make: Ravister/ Air master/ Air flow**				
	Supply, Installation & Commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts,bolts, screws linkages, flanges etc.	Sqm.	6	9454.25	56725.50
365	**GRILLES** **Make: Ravister/ Air master/ Air flow**				
a	Supply, Installation & Commissioning of powder coated extruded aluminium Supply,Installation & Commissioning Air Grills with aluminium volume control dampers.	Sqm.	20	7437.95	148759.00
b	Supply, Installation & Commissioning of powder coated extruded aluminium Return Air Grills without volume control dampers.	Sqm.	36	4758.65	171311.40
366	**INSULATION** **Make: Ductofab/Armacell**				
a	Supply, Installation & Commissioning of Thermal insulation on the Sheet Metal Duct with Factory Pasted Al. Foil Faced Fire retardent 13 mm thick Closed Cell Nitrile Rubber Insulation with necessery Adhesive. The External duct will be finished with 26 G Aluminium Cladding	Sqm.	780	488.80	381264.00
b	Supply, Installation & Commissioning of Acoustic insulation with 10mm thick Nitrile Rubber with necessery Adhesive.	Sqm.	160	659.10	105456.00
c	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS: 8183, density 48 kg/m3, 50m mm thick,wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5 mm x 24 gauge wire mesh for top most ceiling of building	Sq.m	50	617.64	30881.76
367	**Controls & Transmission Wiring**				
	Supply, Installation & Commissioning of control cum transmission wiring of 2 core x 1.5 sqmm copper in suitable PVC conduits.	RM	200	178.75	35750.00
368	**Main Air-conditioning Panel(MCC)** **Make: L&T/ Legrand/Snhnider**				
	Supply, Installation & Commissioning of MCC Panel for Chilled Water System,Chilled Water Pump, Hot Water Generator,Hot Water Pump.	Nos.	1	731050.00	731050.00
369	**AHU STARTER PANELS** **Make: L&T/ Legrand/Snhnider**				
a	3.7 KW	Nos.	5	20150.00	100750.00
b	2.2 KW	Nos.	4	19500.00	78000.00
c	1.5 KW	Nos.	4	19110.00	76440.00
d	1.1 KW	Nos.	5	19110.00	95550.00
e	1.0 KW	Nos.	1	19110.00	19110.00
370	**FAN STARTER PANELS Make: L&T/ Legrand/Snhnider**				
a	1 KW	Nos.	3	19110.00	57330.00
b	1.5 KW	Nos.	14	19110.00	267540.00
c	Supply, Installation & Commissioning of MCB for Single phase units	Nos.	94	585.00	54990.00
371	Supply & Delivery 2 ton capacity split type AC machines with 5 star rating and R410A refrigerent gas including compressor condensing copper cooling coil. (Make-Daikin/Hitachi/Blustar/ Mitsubishi)	Nos.	5	59,394.00	296970.00
372	Installation and commissioning charges for 2.0 TR capacity Hi wall type Split Air Conditioner with complete inddor unit and outdoor unit installation M.S. Structure, laying & fixing of refrigeration copper pipe with insulation and water drainage pipeline as required. .	Nos.	5	2,020.00	10100.00
373	Supply of Drainage pipe of A.C machine with insulation	Fts.	100	45.45	4545.00
374	Additional Supply of refrigeration copper pipe with insulation by adequate size nitrile rubber for Split type AC .	Fts.	100	222.20	22220.00
375	Additional Electrical cable for indoor to outdoor unit for 2 TR split AC	Fts.	100	70.70	7070.00
376	Supply and Fixing Angle Iron Clamp for supporting the outdoor unit	Nos.	5	875.67	4378.35
377	Supply and Fixing materials for supporting the indoor unit	Nos.	5	1,500.00	7500.00

Sl No.	Description Of Items	Unit	Quantity	Rate	Amount (Rs.)
378	Preparation of Details Drawing and Design (Including as building)of HVAC System	Unit	1	292992.00	292992.00
379	**Fire Detection System(FDS)** **Make: Honeywell/GST/Siemens/Bosch/ Johnson Control**				
a	Supply, Installation, Testing & Commissioning of Addressable Smoke Detector + With Isolator Base (AFC)	Nos	84	3,921.14	329375.76
b	Supply, Installation, Testing & Commissioning of Addressable Smoke Detector + With Isolator Base (BFC)	Nos	363	3,753.58	1362549.54
c	Supply, Installation, Testing & Commissioning of Addressable rate of rise Heat Detector + With Isolator Base	Nos	3	3,602.54	10807.62
d	Supply, Installation, Testing & Commissioning of Addressable Monitor/Input Module for Fire Flow switch	Nos	5	4,167.76	20838.80
e	Supply, Installation, Testing & Commissioning of Addressable Relay/output module for AHU/Lift	Nos	32	4,433.26	141864.32
f	Supply, Installation, Testing & Commissioning of Addressable Duct Detector	Nos	20	12,054.88	241097.60
g	Supply, Installation, Testing & Commissioning of Horn/Strobe	Nos	15	4,786.08	71791.20
h	Supply, Installation, Testing & Commissioning of Addressable 6 Loop Fire Alarm panel (Expendable upto 8 Loop capacity) with all accessories	No	1	4,00,640.68	400640.68
j	Supply, Installation, Testing & Commissioning of Response indicator	Nos	84	136.88	11497.92
k	Supply, Installation, Testing & Commissioning of Addressable Manual call point	Nos	15	3,974.24	59613.60
l	Cu. armd. Cables - 1.5 SQMM X 2 CORE 2XWY COPPER XLPE INSU. ARMOURED STR FRLS CABLE 1.1KV AS PER IS 7098(PART 1) 1988 /	Mtrs	4100	202.96	832136.00
					13,12,41,191.00
	Rupees Thirteen Crore Twelve Lakh(s) Forty One Thousand One Hundred Ninety One Only				