

**Asian Development Bank (ADB) Assisted
Delhi Water Supply Improvement Investment Program**

BIDDING DOCUMENT

**For
Procurement
of**

DWSIIP / 04: Transmission System Improvement and Construction of Clear Water Reservoirs & Pumping Stations for Wazirabad WTP Command area including SCADA & Instrumentation

Under International Competitive Bidding

(Following ADB's single stage two envelope bidding procedure)

Volume 6

PRICE BID



Executing Agency:

**Delhi Jal Board,
Varunalaya
Jhandewalan
Karol Bagh
New Delhi-110005**



Consultant/PMC:

NJS Consultants Co., Ltd.
In Joint Venture with
**ICRA Management Consulting Services Limited
TATA Consulting Engineers Ltd. &
NJS Engineers India Pvt. Ltd.**
Gyan Avenue, 12 Pragati Market
Ashok Vihar II, Delhi – 110 052

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VOLUME 6

PRICE BID

Letter of Price Bid

-Note-

The bidder must accomplish the Letter of Price Bid on its letter head clearly showing the bidder's complete name and address.

Date:

ICB No.: DWSIIP/04

Invitation for Bid No.:

To:

Delhi Jal Board (DJB)
Project Manager, DWSIIP
Executive Engineer (EAP) III
Delhi Jal Board,
Overhead Tank, Ashok Vihar,
Delhi-110052, India

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.
- (b) We offer to execute in conformity with the Bidding Documents and the Technical Bid submitted for the following Works.

Transmission System Improvement and Construction of Clear Water Reservoirs & Pumping Stations for Wazirabad WTP Command area including SCADA & Instrumentation

- (c) The total price of our Bid, excluding any discounts offered in item (d) below is:

[amount of foreign currency in words], [amount in figures], and [amount of local currency in words], [amount in figures]

The total bid price from the Summary of Bill of Quantities should be entered by the bidder inside this box. Absence of the total bid price in the Letter of Price Bid may result in the rejection of the bid.

- (d) The discounts offered and the methodology for their application are: [. . .insert discounts and methodology for their application if any . . .]
- (e) Our Bid shall be valid for a period of 180 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (f) If our Bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents.
- (g) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract.¹

¹ If none has been paid or is to be paid, indicate "None".

Name of Recipient	Address	Reason	Amount
.....
.....

- (h) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (i) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (j) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB.

Name

In the capacity of

Signed

.....

Duly authorized to sign the Bid for and on behalf of

Date

Bill of Quantities

Preamble to Bill of Quantities

1. The Bill of Quantities (BOQ) shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions of Contract, Employers Requirements, Specifications, and Drawings.
2. The quantities given in the BOQ are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Employer's Representative, and valued at the rates and prices bid in the priced BOQ, where applicable, and otherwise at such rates and prices as the Employer's Representative may fix within the terms of the Contract.
3. The rates and prices quoted in the priced Bill of Quantities shall, except as otherwise provided under the Contract, include all construction equipment, labor, supervision, materials, surveying, setting out, erection, maintenance, all lead and lift, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed covered by other rates and prices entered in the Bill of Quantities. The units and rates in figures entered into the Bill of Quantities should be typewritten or if written by hand, must be in print form. Bill of Quantities not presented accordingly may be considered nonresponsive.
5. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
6. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
7. Arithmetic errors will be corrected by the Employer as follows:
 - 7.1. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected.
 - 7.2. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
 - 7.3. If there is a discrepancy between the bid price in the Summary of Bill of Quantities and the bid amount in item (c) of the Letter of Bid, the bid price in the Summary of Bill of Quantities will prevail and the bid amount in item (c) of the Letter of Bid will be corrected.

- 7.4. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to 7.1,7.2 and 7.3 above.
8. The method of execution and measurement of completed work for payment shall be in accordance to the respective procedures provided in the Standard Specifications or Particular Specifications under this Contract and in the absence of which shall be in accordance to the relevant BIS Standard and Standard Specification of the National Capital Region, Delhi or Standard Specification published by the Central Public Works Department, Government of India as the case may be.
 9. Rock shall be ordinary rock or hard rock however excavation with blasting is not permitted and contractor should use of metal wedges and sledgehammers, or the use of compressed air drilling for their removal, if that cannot be extracted by ripping with a tractor of at least 150 brake horsepower (BHP) with a single, rear-mounted, heavy-duty ripper.
 10. All defective works are liable to be demolished, rebuilt and defective materials replaced by the Contractor at his own cost and time
 11. In view of the site location and their prevailing condition, it is mandatory to the Contractor to visit the site and make himself thoroughly familiar with the site conditions, access and account for all possible difficulties and other requirements mentioned elsewhere in his bid prior to submission. When a contractor submits his bid for this work, it will be considered that he has quoted for this work with full and complete knowledge of the site and prevailing conditions, and no claim for additional compensation shall be entertained on this account.
 12. Description of items in this BOQ is by itself not complete, and for a full description the BOQ should be read together with the Standard Specifications and Drawings. Rates quoted in the BOQ are deemed to have included all aspects covered in the Preamble and Technical Specifications, and all features and details shown in the Drawings.
 13. The Bidder shall, in the course of studying the Bidding Document, point out all his/her remarks on the documents and make all his/her queries to the Employer who will study these remarks and clarify any discrepancy between the Bidding Documents.
 14. Submissions shall be strictly in accordance with the documents and shall not be qualified in any way. The Bidder shall not alter the text of the BOQ.
 15. Extra and excess items of work shall not vitiate the Contract. The Contractor shall be bound to execute extra items of work as directed by the Engineer. The rates for extra items will be as per rates decided under Contract Conditions.
 16. For the evaluation process, if requested by the Evaluation Committee, the Contractor shall provide a sheet analysis for all priced items showing how the rate entered was derived.
 17. The rates shall be deemed to include all the cost of Works described in the Bidding Documents to design, construction, operate, maintain and manage the water supply system and services in service area of the Project as per the scope of work.
 18. The Bidder shall satisfy himself/herself as to the meaning of every item in the BOQ. The rates and prices inserted in the BOQ by the bidder shall be deemed to cover all costs of construction equipment, labour, supervision, materials, erection, costs, taxes, customs and import duties, GST, levies, profits, together with all general risks, liabilities, insurance and obligations set forth or implied in the Contract, as well as proper

operation, maintenance and management of the Works including, but not limited to the following:

- i. All labor and Materials including consumables;
 - ii. All temporary work of every description required including over ground pumping and other requirements to avoid disruption to the service whilst maintenance or repair work is carried out;
 - iii. All temporary works required to dovetailing with Existing System, for example valving, capping off, interconnections etc all works complete, including those areas which are presently being directly supplied from transmission mains to bring them under the UGR supply regimes.
 - iv. The provision and use of all equipment, tools and Plant of every kind, whether mechanical or non-mechanical, required for the expeditious carrying out of the Works in their proper sequence;
 - v. Provision for scaffolding, staging, guard rails, temporary stairs, temporary access during execution, approach roads up to the Site for the movement of vehicles, and heavy excavation machinery with supporting transport facility;
 - vi. Provision for excavation, back-filling, bringing to the Site extra fill for back-fill, making good and reinstating surfaces, disposing of surplus material, dealing with all ground water and wastewater flows, and for work in close proximity to other utility apparatus including protecting that apparatus;
 - vii. Provision for work on pipe line corridors such as traffic control measures, safety barriers, obtaining any approvals and permits from authorities, and reinstatement of surfaces and compliance with the safeguards documents as in Employers Requirements;
 - viii. Cooperation and coordination of the work with related authorities, other contractors and utilities, including obtaining their permission before starting the related Works if required; and
 - ix. Providing security arrangements to guard the Site and premises at all times and to maintain strict control on the movement of Materials and labor until the completion of the work. The supply of plant and equipment and all costs in connection therewith.
 - x. The supply, operation, repair/replacement, maintaining in good order and ultimate return to the Employer, of all necessary measurement and recording equipment required to undertake the contract efficiently, including all pipe and valve locators, temporary flow meters, pressure gauges, pressure/level transducers, data loggers and all leak detection equipment, etc.
 - xi. Hydrostatic testing, disinfection, neutralising of highly disinfected water discharges, and commissioning of new mains and service connections.
19. All electricity costs and initial connection charges etc associated with operation services, including the electricity charges for the Customer Relation Management Centres, shall be paid by DJB directly to the electricity service provider. The power connections shall be obtained in the name of DJB, the charges of which will be paid by DJB directly to electricity department or reimbursed under provisional sum if paid by the Contractor.
20. The serviceable materials, recovered while shifting of utilities as ascertained by the Project Manager, shall be deposited at designated store yards or as directed by the Project Manager. No payment shall be made to the Contractor in this regard.

21. Works itemized in the BOQ will be subject to measurement. Such measurement will be in the unit of measurement shown the BOQ and payment shall be made on the measured quantities.
22. All rules and regulations of the labor department, contract labor Laws, provident fund and employee state insurance and connected Laws, and all other Laws of the land are to be complied with by the Bidder within the quoted rates.
23. Where it is beneficial for small modifications to be made to the contract boundary, during the period of the Contract, in order to benefit from supply patterns or to simplify/optimize hydraulic boundaries, adjustments may be made to the contract boundary following agreement with the Engineer, the E.E.'s and other Contractors in adjacent areas, and subject to DJB's approval in principle. No claims or extensions of time will be allowed for such contract boundary adjustments.
24. The Employer will not take over any excess materials ordered by the Contractor. The Contractor must therefore minimize over-ordering of materials. Procurement shall therefore be undertaken in stages, material requirements being refined and finalized as the project proceeds. Where small quantities of materials are envisaged in BOQ, their procurement shall not be implemented until quantities have been confirmed from site investigations and design work, etc. At the start of the contract, the Contractor shall submit to the Engineer for approval details of his proposed staged procurement strategy, including a mitigation strategy for materials that have long lead-in times or manufacturing/delivery periods. For his initial procurement, the Contractor may propose to procure up to 30% of the quantities in BOQ for items requiring significant quantities to be procured (for example major pipe items, etc.). Approval of his strategy by the Engineer shall not relieve the Contractor of his responsibility to minimize the over-ordering of materials and the ultimate disposal of surplus materials, the costs of which are deemed to be included in the contract rates.
25. The terms of payment for the BOQ items are included in Schedule 3: Contractor's Payment section of Section 8, Conditions of Contract, Vol 1.
26. Items left blank shall be deemed to have been included in other items. The TOTAL for each BOQ and the TOTAL of the Summary shall be deemed to be the total price for executing the Works in complete accordance with the Contract, whether or not each individual item has been priced.
27. The Provisional Sum included and so designated in the BOQ shall be expended in whole or in part at the direction and discretion of the Employer's Representative in accordance with the Conditions of Contract. It will be used by the Employer's Representative for nominated specialist sub-contractors, line agencies, installation of power connections/power feeder by the electricity department, third party inspecting agencies, charges levied by statutory electrical, telephone, or other authorities towards fees / deposits for permissions for work or for relocation of utilities above or underground that conflict with the existing or permanent line or level of the Works, procurement of satellite imagery, organising of workshops, Independent Auditor, DAB or for other miscellaneous works. The use of the Provisional Sum will also be for independent sampling and laboratory testing, as directed by the Employer's Representative, replacement or compensation for plants and trees removed due to the Work requirement as directed by the Employer's Representative.

28. The unit for payment of Operation Services should be as follows:

For the period between Final Taking Over Date to Contract Completion: Based upon the MLD of water supplied to the service area measured at the starting point of transmission lines. Once all the transmission lines are commissioned, Design Build Period will be over and Final O&M period will start. The payment will be made as per the MLD of water supply to all Transmission lines from the Clear Water Pumping Stations with the guaranteed minimum payment towards the guaranteed estimated year wise water supply quantity as per Section 6: Employers Requirements.

The payment for operation services will be as per the provisions of Schedule 3 – Contractors Payment and achievement of Performance Target stipulated as per Schedule 5 of Conditions of Contract, Section 8, Vol 1.

29. The Contractor has to ensure availability of minimum manpower during the Operation Services period as stipulated under Clause No 6.5, Personnel Requirement, Section 6, Employers Requirement. The Contractor need to submit details of manpower deployed on monthly basis as a part of their Operating Performance Report (OPR). Penalty will be levied at the rate of 1% of the annual O&M fee per month (maximum penalty 10% of annual O&M fee) in case the Contractor is unable to demonstrate availability of the following manpower.

30. The Asset Replacement Fund includes the assets to be replaced during the Operation Services period as per Clause No 6.1.19, Operation and Maintenance, Section 6, Employers Requirement, Volume 1 and as per the provision of the Conditions of Contract Clause No 14.18.

31. The Daywork Schedule is included to cater for the probability of unforeseen work, outside the items included in the Bill of Quantities. The description of daywork schedule are as below:

General

- (a) Work shall not be executed on a Daywork basis except by written order of the Engineer. Bidders shall enter basic rates for Daywork items in the Schedules, which rates shall apply to any quantity of Daywork ordered by the Engineer. Nominal quantities have been indicated against each item of Daywork, and the extended total for Daywork shall be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for Daywork shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

Daywork Labor

- (b) In calculating payments due to the Contractor for the execution of Daywork, the hours for labor will be reckoned from the time of arrival of the labor at the job site to execute the particular item of Daywork to the time of return to the original place of departure, but excluding meal breaks and rest periods. Only the time of classes of labor directly doing work ordered by the Engineer and for which they are competent to perform will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
- (c) The Contractor shall be entitled to payment in respect of the total time that labor is employed on Daywork, calculated at the basis rates entered by him in the Schedule of Daywork Rates: 1. Labor. The rates for labor shall be deemed to cover all costs to the Contractor including (but not limited to) the amount of wages paid to such labor,

transportation time, overtime, subsistence allowances, and any sums paid to or on behalf of such labor for social benefits in accordance with (Country of Borrower) law, as well as Contractor's profit; overheads; superintendence; liabilities and insurance and allowance to labor; timekeeping and clerical and office work; the use of consumable stores, water, lighting, and power; the use and repair of stagings, scaffolding workshops, and stores portable power tools; manual plant and tools; supervision by the Contractor's staff, foremen, and other supervisory personnel; and charges incidental to the foregoing. The rates shall be stated in the local currency, but payments will be made in the following currency proportions:

- foreign: percent [*The bidder shall state the percentage in a common foreign currency equivalent required for payment and the exchange rates and official sources used*]
- local: percent [*To be stated by bidder*]

Daywork Materials

(d) The Contractor shall be entitled to payment in respect of materials used for Daywork (except for materials for which the cost is included in the percentage addition to labor costs as detailed heretofore), at the rates entered by him in the Schedule of Daywork Rates: 2. Materials and shall be deemed to include overhead charges and profit as follows;

- the rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc., and shall provide for delivery to store for stockpiling at the Site. The rates shall be stated in local currency but payment will be made in the following currency proportions:
 - foreign: percent [*The bidder shall state the percentage in a common foreign currency equivalent required for payment and the exchange rates and official sources used*]
 - local: percent [*To be stated by bidder*]
- the cost of hauling materials for use on work ordered to be carried out as Daywork from the store or stockpile on the Site to the place where it is to be used will be paid in accordance with the terms for Labor and Constructional Plant in this Schedule.

Daywork Contractor's Equipment

(e) The Contractor shall be entitled to payments in respect of Contractor's Equipment already on Site and employed on Daywork at the basic rental rates entered by him in the Schedule of Daywork Rates:3. Contractor's Equipment. The said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, and all overhead profit and administrative costs related to the use of such equipment. The cost of drivers, operators, and assistants will be paid for separately as described under the section on Daywork Labor.

(f) In calculating the payment due to the Contractor's Equipment employed on Daywork, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the traveling time from the part of the Site where the Construction Plant was located when ordered by the Engineer to be employed on Daywork and the time for return journey thereto shall be included for payment.

(g) The basic rental rates for Contractor's Equipment employed on Daywork shall be stated in local currency but payments to the Contractor will be made in currency proportions as follows:

- (i) foreign: percent [The bidder shall state the percentage in a common foreign currency equivalent required for payment and the exchange rates and official sources used]
- (ii) local: percent [To be stated by Bidder]

32. Metric System and Abbreviations

Millilitre	ml
Million Litres per Day	mld
Million Litre	ML
Litre	ltr
Linear meter	m
Running meter	Rmtr
Gram	gm
Square metre	Sqm
Cubic metre	Cum
Number	No.
Kilogram	kg
Quintal	Qtl
Lump Sum	LS
Indian Rupees	INR
Millimetre	mm
Square Centimetre	cm ²
Square Millimetre	mm ²

33. The abbreviations used in the Specification and BOQ shall be read as follows:

IS	Indian Standard
BHP	Brake Horsepower
BS	British Standard
Cm or CM or cm	Centimeter
Cum or CUM	Cubic Meter
MM or mm	Millimeter /s
Rm or RM or RMT	Running Meters
Sqm	Square Meters
SqKm	Square Kilometers
Qty.	Quantity
Drg.	Drawing
No. or Nos.	Number or Numbers
PCC	Plain Cement Concrete
RCC	Reinforced Cement Concrete
INR	Indian Rupees

34. Bidders to asses & include cost towards general items like survey, Design, Drawings, Documents, SIP Preparation in their overall cost. Nothing extra will be paid towards above general items.

35. No product used in the works shall be of or made from re-cycled and old materials, unless approved and permitted by the Engineer-in-Charge.

36. Each stage of work shall leave the final surface and other conditions which are required by the next stage so that no unnecessary double payment is made for 'repairs', 'cleaning', etc.
37. Any variations in the specifications can be accepted only after demonstration of quality of material and works therefrom and subject to approval of Engineer.
38. Alternative schemes and technologies shall be only accepted after demonstration of quality of material and works therefrom, subject to approval of Engineer. Nothing in the approval or acceptance shall relieve the contractor from his liability and responsibility to provide quality work of the requisite strength and durability. There shall be demonstrated cost benefit to the Client.
39. Undertaking detailed hydro testing after exposing the structure as per requirements and as directed, with the use of permitted quality and source of water. The repairs required for leakages after rehabilitation and repairs shall not be paid extra. Repairs shall be undertaken as required and/ or as directed. Fluorescent dye and other advanced methods may be used for better and comprehensive results, for testing prior to rehab also.
40. Detailed visual inspection report shall be prepared of the empty and exposed structural members along with photos, drawings, etc. – clearly showing the structural arrangement and dimensions.
41. Bidders may note that the Cost of Guaranteed Power Consumption and life cycle cost of Operation and maintenance calculated as per procedure stipulated at ITB 36.6 will be added to the Bid Price (Design Build costs) to obtain the Evaluated Bid Price upon which the decision for award of contract will be based

FORM TECH-1 Guaranteed Electrical Power Consumption

Year	Kwhr / ML of water supplied (1)	ML of water supplied during year (2)	Total kWhr Consumed in Year (3) = (1) x (2)	Cost of Power consumed in INR @ INR 7.3 per Kwh (1) = (3) X7
OM-1		199,301		
OM-2		201,110		
OM-3		202,902		
OM-4		204,711		
OM-5		206,519		
OM-6		208,328		
OM-7		210,137		
OM-8		211,929		
OM-9		213,737		
OM-10		215,546		
			Total Cost of Power from OM-1 to OM-10	

Schedules

Schedule of Payment Currencies

Forinsert name of Section of the Works

Separate tables may be required if the various sections of the Works (or of the Bill of Quantities) will have substantially different foreign and local currency requirements. In such a case, the Employer should prepare separate tables for each Section of the Works.

	A	B	C	D
Name of Payment Currency	Amount of Currency	Rate of Exchange to Local Currency	Local Currency Equivalent C = A x B	Percentage of Net Bid Price (NBP) $\frac{100 \times C}{NBP}$
Local Currency		1.00		
Foreign Currency #1				
Foreign Currency #2				
Foreign Currency #3				
Net Bid Price				100.00
Provisional Sums Expressed in Local Currency		1.00		
BID PRICE				

- Note -

The rates of exchange shall be the selling rates 28 days prior to the deadline for submission of bids published by the source specified in BDS 15.

Tables of Adjustment Data

To be entered by the bidder

Table A - Local Currency

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Local Currency Amount	Bidder's Proposed Weighting
	Nonadjustable	—	—	—	A: <u>0.15</u> B: _____ C: _____ D: _____ E: _____
Total					1.00

Table B - Foreign Currency

Name of Currency:

Insert name of currency. If the bidder wishes to quote in more than one foreign currency, but in no case more than three, this table should be repeated for each foreign currency.

To be entered by the bidder

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Currency in Type/Amount	Equivalent in FC1	Bidder's Proposed Weighting
	Nonadjustable	—	—	—		A: <u>0.15</u> B: _____ C: _____ D: _____ E: _____
Total						1.00

- Note -

As per GCC 1.1.3.1, "Base Date" means the date 28 days prior to the latest date for submission of the bid.

Tables of Adjustment Data shall only be included if prices are to be quoted as adjustable prices in accordance with ITB 14.5.

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
Part (A) TRANSMISSION LINE											
1	Dismantling of flexible pavement (bituminous courses) by mechanical means and disposal of dismantled material upto a lead of 1 KM, as per direction of Engineer-in-charge.	Cum	10452.96								
2	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead as per direction of Engineer-in-charge.										
	In Cement Mortar	Cum	40.00								
3	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 Metres lead as per direction of Engineer - in - charge.										
	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	Cum	1622.00								
4	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead as per direction of Engineer-in-charge :										
	In Cement Mortar	Cum	30.00								
5	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 Metres lead as per direction of Engineer - in - charge.	Cum	2742.27								
6	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineering-charge.	Sqm	522.00								
7	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 Metres lead as per direction of Engineer-in-charge.	Kg.	100.00								
8	Taking out existing kerb stones of all types from footpath/ central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 Metre lead as per direction of Engineer-in-Charge.	Mtr.	100.00								
9	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 Metre lead as per direction of Engineer-in-Charge.	Sqm	10.00								
10	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, Jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making Joints with or without grooves (thickness of Joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	Cum	2.00								
11	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the Joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	10.00								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
12	Providing and fixing 2.0 m high MS sheet barricading with frame of angle iron 40 x 40 x6 mm every post to be welded with M.S channel ISLC 100 x 50 X 6.4 mm horizontal i/c making of hole in the channel for providing embedding of 16 mm dia round torque bard in the road as per drawing.	Per Meter of 2.0 m height	72754.00								
13	Earth work in excavation by mechanical means (Hydraulic Excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 Sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.										
	All kind of soils	Cum	120007.01								
14	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 Sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m.										
	Ordinary Rocks	Cum	3711.56								
15	Extra for every additional lift of 1.5 Mtr. or part thereof in excavation/banking excavated or stacked materials										
	All kind of soils	Cum	53818.19								
	Ordinary/ hard rocks	Cum	1664.48								
16	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating Each deposited layer by ramming and watering, lead up to 50m and lift upto 1.5m.	Cum	90769.18								
17	Carriage of materials by Mechanical transport including loading unloading and stacking										
	Earth										
	lead -1 km	Cum	11192.26								
	lead -2 km	Cum	8394.20								
	lead -5 km	Cum	5596.13								
	Beyond 5Km upto 10 km (per km)	Cum / Km	2798.07								
18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge	Cum	18471.02								
19	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered):										
	Depth not exceeding 1.5 m	Sqm	5435.64								
	Depth exceeding 1.5 m but not exceeding 3 m	Sqm	5580.46								
20	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level										
	1:2:4 (1 Cement : 2 coarse sand (Zone III): 4 graded stone aggregate 20 mm nominal size)	Cum	7655.16								
21	Centring and shuttering including strutting, propping etc. and removal of form for :										
	Foundations, footings, bases of columns etc. for mass concrete.	Sqm	377.62								
	Wall (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	Sqm	14639.15								
	Suspended floors, roofs, landings, balconies and access platform	Sqm	652.16								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
22	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixture for all leads, having continuous agitated mixture, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C from transit mixture to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-in-charge.All works upto plinth level. (Note: Cement content considered in this item is @ 330 Kg./Cum Excess /less cement used as per design mix is payable/recoverable separately.)										
	All works upto plinth level	Cum	3884.58								
23	Steel Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete .										
	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg.	486963.30								
24 a	Supplying and stacking at the site precast concrete manhole cover with steel fiber of ISI marked conforming to IS: 12592 part I of EHD 35 with matching frame of calass EHD 35 IS 12592 part II with 875 mm external dia. And clear 560 mm internal dia.	Each	70.00								
24 b	Fixing of SFRC manhole cover and frame , 560 mm dia HD -20 / EHD 35	Each	70.00								
25	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	470.00								
26	Providing and fixing C.I. sluice valves (with cap) complete with bolts,nuts, rubber insertions etc. (the tail pieces if required will be paid separately) : (For Air Valve)										
	100 mm Class I	Each	1.00								
	150 mm Class I	Each	6.00								
	200 mm Class I	Each	5.00								
27a	Providing/Supplying at site ISI Mark Ductile Iron Electrically operated Scour valves of rating PN 1.0 with unloading & stacking etc. complete as per IS 14846 specifications or as directed by Engineer-In-Charge.										
	400	Each	3.00								
	500	Each	1.00								
	700	Each	2.00								
	800	Each	1.00								

Schedule No. 1(a)- Design-Build : Civil Works											
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									Total Price LC (INR)	FC Component (Currency)	
27b	Fixing in position D.I Scour valve and providing flanged Joints (2 nos) with bolts, nuts , rubber Insertion etc all complete including testing of Joints.										
	400	Each	3.00								
	500	Each	1.00								
	700	Each	2.00								
	800	Each	1.00								
28a	Providing & fixing of Double orifice type Kinectic Air Valve of rating PN 1.0 as per standard specifications combined with screw doen isolating valve, providing flange Joints two numbers, small orifice elastic ball resting on a gun metal nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face drilled, insurance, third party inspection charges, loading, Unloading transportation upto departmental stores/ site etc complete as per IS 14845 specifications or as directed by Engineer-In-Charge. These rates are excluding excise duty component.										
	150 mm	Each	4.00								
	200 mm	Each	5.00								
28b	Providing & fixing C.I/ D.I Double acting air valve of approved quality with bolts, nuts, rubber insertions etc, complete (the tail piece,tapers etc. if required will be paid separately.)										
	100mm dia.	Each	3.00								
29a	Providing/Supplying at site ISI Mark Ductile Iron motorised/electrically actuated Butterfly Valve of rating PN 1.0 as per specifications, transportation up to site, loading, unloading & stacking etc. complete as per IS 13095 specifications / BS EN 593 or as directed by Engineer-In-Charge.										
	400 mm	Each	1.00								
	500mm	Each	1.00								
	600 mm	Each	1.00								
	700 mm	Each	3.00								
	800 mm	Each	3.00								
	900 mm	Each	7.00								
	1200 mm	Each	1.00								
	1400 mm	Each	3.00								
	1500 mm	Each	4.00								
29 b	Fixing in position C.I/D.I Sluice valve /Butterfly valve and providing flanged Joints (2 nos) with bolts, nuts , rubber Insertion etc all complete including testing of Joints.										
	400 mm dia.	Each	1.00								
	500 mm dia.	Each	1.00								
	600 mm dia.	Each	1.00								
29c	Laying in position M.s Specials/ Steel cylinder reinforced concrete specials suitable for rubber ring Jointing or welding or flanged Jointing (excluding cost of specials)	Qlt	386.25								
29d	Providing Flanged Joints to double flanged CI/DI pipes and specials , including testing of Joints.										
	700 mm	Each	6.00								
	800 mm	Each	6.00								
	900 mm	Each	14.00								
	1200 mm	Each	2.00								
	1400 mm	Each	6.00								
	1500 mm	Each	8.00								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
30	Providing and fixing Mild Steel Dismantling Joints of pressure rating PN 1.6 with both side flange end suitable for installation in between flange end pipes.										
	150	Each	10.00								
	200	Each	12.00								
	400	Each	8.00								
	500	Each	4.00								
	600	Each	2.00								
	700	Each	8.00								
	800	Each	6.00								
	900	Each	14.00								
	1200	Each	2.00								
	1400	Each	6.00								
	1500	Each	8.00								
31	Filling water into watermain for testing to specific head water to be arranged by sinking of tubewell or pumping out the underground water and filling the same into water mains including installation of pumps of sufficient capacity in head proving and fixing delivery and suction pipe etc.all complete as directed by Engineer In charge										
	400	Mtr.	468.00								
	500	Mtr.	482.00								
	600	Mtr.	791.00								
	700	Mtr.	4768.00								
	800	Mtr.	4329.00								
	900	Mtr.	11453.00								
	1100	Mtr.	170.00								
	1200	Mtr.	2090.00								
	1400	Mtr.	6242.00								
	1500	Mtr.	6820.00								
32	Disinfecting C.I./D.I. water mains by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory.										
	400	Mtr.	468.00								
	500	Mtr.	482.00								
	600	Mtr.	791.00								
	700	Mtr.	4768.00								
	800	Mtr.	4329.00								
	900	Mtr.	11453.00								
	1100	Mtr.	170.00								
	1200	Mtr.	2090.00								
	1400	Mtr.	6242.00								
	1500	Mtr.	6820.00								
33	Hire charges of Pump set of capacity 4000 litres/hour for puming out of water. (include cost of services of operating staff, Cost of lubricating oil, diesel / Petrol/ Kerosene oil , other consumables for running the plant and machinery and including GST. 2. The hire charges of plant machinery on per day basis are for single shift of eight working hours.)	per day/shift	569.00								

Schedule No. 1(a)- Design-Build : Civil Works											
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									Total Price LC (INR)	FC Component (Currency)	
34	Providing mild steel pipes fabricated/ Manufactured out of MS plates of steel grade Fe 410 as per IS :3589- 2001 or out of HR coils of same/equivalent grade; internally lined with cement mortar conforming to IS 3589:2001 ; and having external/ outside 4 mm coal tar coating and wrapping conforming to IS 10221-2008; complete in all respect: with upto date ammendments in relevant IS codes and as directed by Engineer-In -Charge.										
	1500 mm nominal dia (clear internal dia.) pipe of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside 4mm coal tar coating.	Mtr.	6373.00								
	1400 mm nominal dia (clear internal dia.) pipe of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside 4 mm coal tar coating.	Mtr.	5711.00								
	1200 mm nominal dia (clear internal dia.) pipe of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside 4 mm coal tar coating.	Mtr.	2069.00								
	1100 mm nominal dia (clear internal dia.) pipe of 10 mm thickness(min.) , 9 mm internal cement mortar lining and outside 4mm coal tar coating.	Mtr.	170.00								
35	Providing mild steel pipes fabricated/ Manufactured out of MS plates of steel grade Fe 410 as per IS :3589- 2001 or out of HR coils of same/equivalent grade; internally lined with cement mortar conforming to IS 3589:2001 ; and having external/ outside epoxy coating ; complete in all respect: with upto date ammendments in relevant IS codes and as directed by Engineer-In -Charge.										
	1500 mm nominal dia (clear internal dia.) pipe of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside epoxy coating.	Mtr.	30.00								
	1400 mm nominal dia (clear internal dia.) pipe of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside epoxy coating.	Mtr.	553.00								
	1200 mm nominal dia (clear internal dia.) Specials of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside epoxy coating.	Mtr.	21.00								
36	Providing mild steel Special fabricated/ Manufactured out of MS plates of steel grade Fe 410 as per IS :3589- 2001 or out of HR coils of same/equivalent grade; internally lined with cement mortar conforming to IS 3589:2001 ; and having external/ outside epoxy coating; complete in all respect: with upto date ammendments in relevant IS codes and as directed by Engineer-In -Charge.										
	1500 mm nominal dia (clear internal dia.) Specials of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside epoxy coating.	Kg..	39952.61								
	1400 mm nominal dia (clear internal dia.) Specials of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside epoxy coating.	Kg..	44333.30								
	1200 mm nominal dia (clear internal dia.) Specials of 12 mm thickness(min.) , 12 mm internal cement mortar lining and outside epoxy coating.	Kg..	11554.01								
	1100 mm nominal dia (clear internal dia.) Specials of 10 mm thickness(min.) , 9 mm internal cement mortar lining and outside epoxy coating.	Kg..	4878.28								
37	Laying in Position M.S Pipe/ Steel Cylinder reinforced concrete pipes suitable for rubber ring Jointing or welding or flanged Jointing (Excluding cost of pipe)	Qtl	84361.88								

Schedule No. 1(a)- Design-Build : Civil Works											
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									Total Price LC (INR)	FC Component (Currency)	
38	Laying in Position M.S Specials/ Steel Cylinder reinforced concrete pipes suitable for rubber ring Jointing or welding or flanged Jointing (Excluding cost of pipe)	Qtl	1007.18								
39	Welding by Gas or electric plant including transportation of plant at site etc. complete.	Cm	6001115.51								
40	Ultrasonic testing of welded Joints by our NDT level II qualified engineers and reporting at our site.	RMtr.	2889.90								
41	Providing and laying S&S Centrifugally Cast Spun) / Ductile Iron Pipes conforming to IS : 8329.										
	DI Class K-7 Pipes										
	200 mm	Mtr.	50.00								
	DI Class K-9 Pipes										
	400 mm	Mtr.	468.00								
	500 mm	Mtr.	411.00								
	600 mm	Mtr.	723.00								
	700 mm	Mtr.	4588.00								
	800 mm	Mtr.	4036.00								
	900 mm	Mtr.	10896.00								
42	Providing push-on-Joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of Joints and the cost of rubber gasket :										
	200 mm	Joint	9.00								
	400 mm	Joint	95.00								
	500 mm	Joint	113.00								
	600 mm	Joint	157.00								
	700 mm	Joint	884.00								
	800 mm	Joint	893.00								
	900 mm	Joint	2098.00								
43	Labour for cutting CI/DI pipes with steel saw.										
	400 mm	Each Cut	14.00								
	500 mm	Each Cut	12.00								
	600 mm	Each Cut	22.00								
	700 mm	Each Cut	138.00								
	800 mm	Each Cut	121.00								
	900 mm	Each Cut	327.00								
44	Providing and laying D.I specials of class K-12 suitable for push-on Joints as per IS:9523										
	Upto 600mm dia.	Qtl.	66.66								
45	Providing and laying D.I specials of class K-12 suitable for push-on Joints as per IS:9523										
	Above 600mm dia.	Qtl.	697.42								
	Trenchless Technology:										
46	Providing Mild Steel Pipes fabricated/manufactured out of MS plate of steel grade Fe 410 as per IS 3589:2001 or out of HR coils of same/equivalent grade; coated internally with food grade epoxy and externally/outside with epoxy coating; complete in all respect; with upto date amendments in relevent IS codes and as directed by Engineer In Charge.										

Schedule No. 1(a)- Design-Build : Civil Works											
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									Total Price LC (INR)	FC Component (Currency)	
	500 mm nominal dia (clear internal dia) pipes of 6 mm thickness (min)	Mtr.	71.00								
	600 mm nominal dia (clear internal dia) pipes of 8 mm thickness (min)	Mtr.	68.00								
	700 mm nominal dia (clear internal dia) pipes of 8 mm thickness (min)	Mtr.	180.00								
	800 mm nominal dia (clear internal dia) pipes of 8 mm thickness (min)	Mtr.	293.00								
	900 mm nominal dia (clear internal dia) pipes of 10 mm thickness (min)	Mtr.	557.00								
	1400 mm nominal dia (clear internal dia) pipes of 12 mm thickness (min)	Mtr.	277.00								
	1500 mm nominal dia (clear internal dia) pipes of 12 mm thickness (min)	Mtr.	104.00								
47	Installation of Product pipe by Auger Boring method in mixed soil type at required depth to correct grade and alignment; complete as per specifications and as directed by the Engineer-In -Charge. (Cost of product pipe, Excavation of Entry and Exit pit, Shoring/strutting, Backfilling, Disposal of surplus Earth, Road Cutting & restoration, Dewatering etc will be paid seperately.										
	450-600 mm diameter	Mtr.	139.00								
	600 - 800 mm diameter	Mtr.	473.00								
48	Installation of Product pipe by Manual pipe jacking method in mixed soil type at required depth and for maximum drive length of 100Metre to correct grade and alignment; complete as per specifications and as directed by the Engineer-In -Charge. (Cost of product pipe, Excavation of Entry and Exit pit, Shoring/strutting, Backfilling, Disposal of surplus Earth, Road Cutting & restoration, Dewatering etc will be paid seperately.										
	900-1000 MM Diameter	Mtr.	557.00								
	1200-1500 mm	Mtr.	381.00								
49	Conducting ground penetrating radar survey in a corridor 4-6 Mtr. width to detect buried utilities like pipes, cables etc in such corridor with information of location and depth to the top of the various utilities detected work to be conducted using 500 Mhz and 300 Mhz antenna to best possible resolution and penetration	Mtr.	1550.00								
	Bridge Crossing										
50	Boring with hydraulic piling rigs with power units, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) :										
	550mm dia piles	Mtr.	198.60								
51	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg.	32781.90								
52	Providing & laying in position cement concrete of specified grade including the cost of shuttering & centering- All work upto the plinth Level.										

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									Total Price LC (INR)	FC Component (Currency)	
	1:3:6 (1 Cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size)	Cum	8855.18								
	PCC layer for Temporary provision (EMP purpose) (Optional for restoration of bituminious & CC length cutted).										
	SUB TOTAL PART A :										
	PART B - CONSTRUCTION OF 1 UGR's OF 120 MLD CAPACITY WITH CLEAR WATER PUMP HOUSE										
	CARRIAGE OF MATERIALS										
1	By Mechanical Transport including loading,unloading and stackingBy Mechanical Transport including loading,unloading and stacking										
	Earth	Cum	10528.00								
	lead of 3 Km										
	Earth	Cum	10528.00								
	lead of 5 Km.										
	Earth	Cum per Km	9023.00								
	Beyond 5 km and upto 10 km										
2	By Manual Labour including loading, unloading and stacking for lead less than 0.50 KM										
	Earth										
	Every additional lead of 50m or part thereof beyond 1st 50m up to 9 such additional leads.	Cum	1504.00								
	EARTH WORK										
3	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge										
	All kinds of soil	Cum	43783.17								
4	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge										
	Ordinary rock	Cum	17826.01								
	Hard rock (blasting prohibited)	Cum	938.00								
5	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 Sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.										
	All kinds of soil	Cum	131.08								
6	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating Each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :										
	All kinds of soil										
a)	Pipes, cables etc. not exceeding 80mm dia	Metre	10.50								

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									Total Price LC (INR)	FC Component (Currency)	
b)	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	Metre	10.00								
7	Extra rate for quantities of works, executed										
	In or under water and / or liquid mud, including pumping out water as required-Earthwork in all kind of soil	Cum per meter depth	79452.59								
8	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating Each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	13703.81								
9	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.										
	All kinds of soil	Cum	145819.77								
10	Supplying and filling in plinth with sand under floors, including watering,ramming, consolidating and dressing complete.	Cum	2.00								
	CONCRETE WORK										
	CONCRETE WORK-CEMENT CONCRET (CAST IN SITU)										
11	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :										
a)	*1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	Cum	116.44								
b)	1:3:6 (1 Cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size).	Cum	1593.01								
12	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:										
	1:2:4 (1 Cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)	Cum	10.00								
	CONCRETE WORK-CEMENT CONCRETE PRECAST										
13	Providing and fixing up to floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc., including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required Centering complete.										
	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20mm nominal size) aggregate 20mm nominal size).	Cum	27.54								
14	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), including the cost of required centering, shuttering complete.										
	1:1½:3 (1 Cement: 1½ coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).	Cum	48.60								
	CONCRETE WORK-DAMP-PROOF COURSE										

Schedule No. 1(a)- Design-Build : Civil Works											
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									Total Price LC (INR)	FC Component (Currency)	
15	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)	Sqm	66.38								
16	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	Kg Per 50 Kg. Cement	10.00								
17	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7Kg. per square Metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil	Sqm	66.38								
CONCRETE WORK-MISCELLANEOUS											
18	Extra for laying concrete in or under water and/or liquid mud including Cum per cost of pumping or bailing out water and removing slush etc. complete	Cum per meter depth	5284.43								
	Note :- The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in Cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05m or more shall be taken as 0.1m and less than 0.05 m ignored.										
REINFORCED CEMENT CONCRETE											
REINFORCED CEMENT CONCRETE-CAST IN SITU											
19	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1½:3 (1 cement : 1½ coarse sand(zone-III) : 3 graded stone aggregate 20mm nominal size).	Cum	5.00								
REINFORCED CEMENT CONCRETE-FORM WORK											
20	Centering and shuttering including strutting, propping etc. and removal of form for all heights :										
a)	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	2101.44								
b)	Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.	Sqm	13533.49								
c)	Suspended floors, roofs, landings, balconies and access platform	Sqm	16025.13								
d)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	1944.52								
e)	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	3555.84								
f)	Stairs, (excluding landings) except spiral-staircases	Sqm	241.07								
	Extra for shuttering in circular work (20% of respective centering and shuttering items)										
g)	Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc. (20% of respective centering and shuttering items)	Sqm	389.88								
h)	Columns, pillars, piers, abutments, posts and struts (Extra for shuttering in circular work (20% of respective centering and shuttering items)	Sqm	3000.00								
i)	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	Sqm	5.00								
j)	Whether shade, chajjas, corbels etc., including edges	Sqm	208.91								

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21	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 Metre or part thereof (Plan area to be measured).										
	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	Sqm	12841.50								
22	Providing and fixing tie bolt, spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-charge.										
	20 mm dia.& 225 mm length	Each Set	10.00								
	PRE-CAST RCC										
23	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level, including the cost of required centering, shuttering but , excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	Cum	9.91								
	STEEL REINFORCEMENT										
24	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete - upto Plinth level and above Plinth Level										
a)	Cold twisted bars/ Hot rolled deformed bars	Kg.	2153491.00								
b)	Hard drawn steel wire fabric	Kg.	50.00								
25	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	Metre	329.38								
	MISCELLANEOUS										
26	Extra for laying reinforced cement concrete in or under water and/ or liquid mud, including cost of pumping or bailing out water and removing slush etc., complete.	Cum	33054.81								
	Note For Item No. 5.31:- The quantity will be calculated by multiplying the depth measured from the subsoil water level up to the centre of gravity of the R.C.C. under subsoil water with the quantity of R.C.C. in cubic Metre executed under subsoil water. The depth of centre of gravity shall be reckoned correct to 0.1 m. 0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored. No extra payment shall be made for placing reinforcement or centering & shuttering under sub - soil water conditions.										
	DESIGN MIX CONCRETE										
27	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 Kg./Cum."Excess/ less cement used as per design mix is payable/recoverable separately).										
	All works upto plinth level	Cum	16570.80								
	All works above plinth level upto floor V level	Cum	1044.32								
28	Extra for providing richer mixes at all floor levels.										
	Note:-Excess/less cement over the specified cement content used is payable /recoverable separately.										

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	Providing M-30 grade concrete instead of M-25 grade BMC / RMC. (Note:- Cement content considered in M-30 is @ 340 Kg./Cum).	Cum	17946.00								
29	Add for using extra cement in the items of design mix over and above the specified cement content therein.	quintal	1795.00								
	WATER PROOFING										
30	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion Joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete :										
a)	Serrated with central bulb (225 mm wide, 8 - 11 mm thick)	Metre	2457.00								
b)	Kickers (320 mm wide, 5 mm thick)	Metre	2457.00								
31	Providing and filling in position, blown bitumen in expansion Joints	Cum	5.00								
32	Providing and filling in position bitumen mix filler of Proportion 80 Kg.. of hot bitumen , 1 Kg.. of cement and 0.25 cubic Metre of coarse sand for depth per expansion Joints.	Cum	5.00								
33	Providing and fixing in position 12mm thick bitumen impregnated fiber board conforming to IS: 1838, including cost of primer, sealing compound Grade-A in expansion Joints.	per cm depth per 100m	10.00								
34	Providing and fixing sheet covering over expansion Joints with iron screws as per design.										
	Non Asbestos fibre cement board 6mm thick as per IS: 14862										
	200mm wide	Metre	10.00								
	Aluminium fluted strips 3.15 mm thick.										
	200 mm wide	Metre	10.00								
	BRICKWORK										
35	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:										
	Cement mortar 1:6 (1 Cement : 6 coarse sand)	Cum	357.00								
36	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :										
	Cement mortar 1:6 (1 Cement : 6 coarse sand)	Cum	510.37								
37	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :										
	Cement mortar 1:4 (1 Cement : 4 Coarse sand)	Sqm	10.00								
38	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.										
	Cement mortar 1:4 (1 Cement : 4 Coarse sand)	Sqm	99.90								
39	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	Sqm	10.00								
	STONE WORK										
	RANDOM RUBBLE MASONRY										
40	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :										
	Cement mortar 1 : 6 (1 cement : 6 coarse sand)	Cum	10.00								
41	Extra for random rubble masonry with hard stone in :										
	Square or Rectangular pillars	Cum	10.00								
42	Pointing on stone work with cement mortar 1 : 3 (1 cement : 3 fine sand)										

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	Raised and cut pointing	Sqm	10.00								
	DOORS & FITTINGS										
43	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters										
	35mm thick including ISI marked stainless steel butt hinges with necessary screws.	Sqm	10.00								
44	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	Sqm	10.00								
45	Extra for providing vision panel not exceeding 0.1 Sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):										
	Rectangular or square	Sqm	10.00								
46	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :										
	250 x 16 mm	Each	284.00								
47	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :										
	250 x 10 mm	Each	71.00								
48	Providing and fixing ISI marked oxidised M.S door latches conforming to IS: 5930 with screws etc., complete:										
	250 x 20 x 6 mm	Each	71.00								
49	Providing and fixing ISI marked oxidised M.S handles conforming to IS: 4992 with necessary screws etc. complete:										
	125 mm	Each	142.00								
50	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc complete :										
	300 mm weighing not less than 200 gms	Each	10.00								
51	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with awall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineerin-Charge.	Metre	9.90								

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52	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing.											
	30 mm thick plain PVC door shutters	Sqm	3.15									
53	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and Jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :											
	For fixed portion											
a)	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kg.	705.19									
	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)											
b)	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kg.	705.19									
54	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineering-charge.											
	Pre-laminated particle board with decorative lamination on both sides	Sqm	39.00									

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55	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge (Cost of aluminium snap beading shall be paid in basic item):										
	With float glass panes of 5.0 mm thickness(weight not less than 12.5 Kg./Sqm)	Sqm	131.76								
56	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 Kg., for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.										
	With brass cover plate minimum 1.25 mm thickness	Each	11.00								
	Flooring										
57	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete										
	40 mm thick with 20 mm nominal size stone aggregate	Sqm	11598.50								
58	52 mm thick cement concrete flooring with concrete hardener topping,under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 Kg. of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete	Sqm	467.51								
59	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement.										
	18 mm thick	Sqm	194.39								
60	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	Sqm	10.00								
61	Kota stone slab flooring over 20 mm (average) thick base laid over and Jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1:4 (1 cement : 4 coarse sand) :										
	25 mm thick	Sqm	700.61								
62	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and Jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	176.00								
	CERAMIC GLAZED TILES										

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63	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and Jointing with grey cement slurry @ 3.3Kg. per Sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	65.25								
TILE FLOORING											
64	Precast terrazo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in floors, and landings, Jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement:4 coarse sand) :										
	Light shade pigment using white cement	Sqm	10269.00								
Roofing											
65	Painting top of roofs with bitumen of approved quality @ 17Kg. per 10 Sqm impregnated with a coat of coarse sand at 60 cudm per 10 Sqm, including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete :										
	With residual type petroleum bitumen of grade VG - 10	Sqm	12920.85								
66	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa @ 35 Kg. per Cum of earth and gobi leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat:										
	With common burnt clay F.P.S.(non modular) brick tile of class designation 10	Sqm	12920.85								
67	Extra for every additional 1 cm thickness of mud phaska	Sqm	10.00								
68	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design										
	In 75 x 75 mm deep chase	Mtr.	1135.70								
69	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	Each	36.00								
RAIN WATER SPOUT AND PIPES.											
70	Providing and fixing 100 mm dia Metre and 60 cm long rain water spout in cement mortar 1 : 4 (1 cement : 4 fine sand)										
	Stoneware spout	Each	144.00								
71	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including Jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.										
	Single socketed pipes.										
	110mm diameter	Metre	864.00								

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72	Providing and fixing on wall face unplastised - PVC moulded fittings/ accessories for unplastised Rigid PVC rain water pipes conforming to IS :										
a)	Single push fit coupler										
	110 mm Single push fit coupler	Each	288.00								
b)	Single Tee with door										
	110 x 110 x 110 mm Single Tee with door	Each	288.00								
c)	Bend 87.5 degree										
	110mm bend	Each	288.00								
d)	Shoe (Plain)										
	110mm shoe	Each	288.00								
73	Providing and fixing unplastised -PVC pipe clips of approved design to unplastised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.										
	110mm	Each	288.00								
74	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	Each	144.00								
	Finishing										
75	12 mm cement plaster of mix : 1:6 (1 Cement : 6 Fine sand)	Sqm	3148.97								
76	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 Cement : 6 Fine sand)	Sqm	2796.79								
77	12mm Cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 Cement : 4 Fine sand)	Sqm	10.00								
78	6mm Cement plaster of mix : 1:3 (1Cement : 3 Fine sand)	Sqm	2413.53								
79	Neat cement punning	Sqm	10.00								
80	White washing with lime to give an even shade : New work (3 or more coats)	Sqm	2413.53								
81	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade										
	New work (two or more coats) over and including water thinnable priming coat with cement primer	Sqm	3148.97								
82	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:- Two or more coats on new work	Sqm	10.00								
83	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface Water thinnable cement primer	Sqm	3148.97								
84	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 Kg./10 Sqm).	Sqm	2796.79								

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85	Washed stone grit plaster on exterior walls height upto 10 Metre above ground level, in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg. of cement per square Metre, top layer 15 mm cement plaster 1:1/ 2:2 (1 cement: 1/2 coarse sand : 2 stone chipping 10 mm nominal size), in panels with groove all around as per approved pattern, including scrubbing and washing the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in- charge (payment for providing grooves shall be made separately).	Sqm	10.00								
86	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge										
a)	15 mm wide and 15 mm deep groove	Metre	10.00								
b)	20 mm wide and 15 mm deep groove	Metre	10.00								
87	Making plinth protection 50 mm thick of cement concrete 1 : 3 : 6 (1 Cement : 3 Coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	Sqm	470.36								
88	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 6mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing with cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits.										
	50 mm thick	Sqm	0.72								
	Steel Works										
89	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg.	20768.97								
90	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.										
	Using M.S. angles 40 x 40 x 6 mm for diagonal braces	Sqm	10.00								
91	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.										
	80 x 1.25 mm M.S. laths with 1.25 mm thick top cover	Sqm	100.25								
92	Providing and fixing ball bearing for rolling shutters	Each	18.00								
93	Extra for providing mechanical device chain and crank operation for operating rolling shutters :										
	Exceeding 10.00 Sqm and upto 16.80 Sqm in the area	Sqm	100.25								

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									Total Price LC (INR)	FC Component (Currency)	
94	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, Joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment).										
	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Kg.	10.00								
95	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, Joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.										
	Fixing with carbon steel galvanised dash fastener of required dia and size(to be paid separately)	Kg.	10.00								
96	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp, of internal dia 140 mm, 73 mm height, top lid of 1.5 mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3 mm dia round headed screws, one lock at the corners. Clamp shall be made of 12 mm dia M.S. bar bent to shape as per standard drawing.	Each	29.00								
97	Steel work welded in built up sections / framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required										
a)	In stringers, treads, landings etc of staircases including use of chequered plate wherever required; all complete	Kg.	100.00								
b)	In gratings, frames, guard bar, ladders, railings, brackets, gates and similar works	Kg.	100.00								
98	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg.	1048.48								
99	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows all complete.										
	With 4.0 mm thick glass panes.	Sqm	10.00								
	ROAD WORK										

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
100	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 Metre openable length (total length 90 m), having 50 nos rounds per 6 Metre length, upto 3 m height of wall with existing angle iron "Y" shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 Kg./ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ Metre (cost of M.S. angle, C.C. blocks shall be paid separately)	Metre	10.00								
101	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 Metres.	Sqm	1867.50								
102	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 Metres										
	With Common burnt clay F.P.S. Non modular bricks of class designation 75	Metre	830.00								
103	Supplying and stacking at site. 90mm to 45mm size stone aggregate.	Cum	373.50								
104	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density .	Cum	373.50								
105	Supplying and stacking of at site Moorum.	Cum	140.06								
	Stone screening 13.2 mm normal size (Type-A) .	Cum	74.70								
106	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete	Cum	186.75								
107	"Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required,laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/expansion, construction & longitudinal Joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling Joints with approved Joint filler and sealants, complete all as per direction of Engineer in-charge (Item of Joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note:- Cement content considered in M-30 is @ 340 Kg./Cum. Excess/ less cement used as per design mix is payable/ recoverable separately										
	Cement concrete prepared with batch mixing machine	Cum	373.50								
SANITARY INSTALLATIONS											

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
108	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:										
	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	2.00								
109	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :										
	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern	Each	2.00								
110	Providing and fixing wash basin with C.I. brackets, 15mm C.P brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:										
	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	Each	2.00								
111	Providing and fixing 100 mm sand cast Iron grating for gully trap.	Each	2.00								
112	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	Each	2.00								
113	Providing and fixing toilet paper holder C.P. brass	Each	2.00								
114	Providing and fixing soil, waste and vent pipes : 100 mm dia										
	Sand cast iron S & S pipe as per IS: 1729.	Metre	14.00								
115	Providing and filling the Joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes : 100 mm dia pipe	Each	6.00								
116	Providing and fixing MS holder - bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10 x 10 x 10 cm of 1 : 2 : 4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of cutting holes and making good the walls etc. 100 mm dia pipe	Each	10.00								
117	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100 mm										
	Sand cast iron S & S as per IS: 1729.	Each	10.00								
118	Providing and fixing plain bend of required degree. 100 mm dia										
	Sand cast iron S & S as per IS: 1729.	Each	10.00								
119	Providing and fixing terminal guard 100 mm										
	Sand cast iron S & S as per IS: 1729.	Each	10.00								
120	Providing lead caulked Joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter 100 mm	Each	15.00								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
121	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors										
	100 mm inlet and 100 mm outlet										
	Sand cast iron S & S as per IS: 1729.	Each	5.00								
122	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work										
	100 mm diaMetre pipe	Metre	15.00								
123	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with soap fittings of approved quality and colour, weighing not less than 105gms.	Each	2.00								
	WATER SUPPLY										
124	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :										
	a) 15 mm dia nominal bore	Metre	100.00								
	b) 20 mm dia nominal bore	Metre	20.00								
125	Providing and fixing GI pipes complete with GI fittings including trenching and re filling etc.										
	External work.										
	a) 15 mm dia nominal bore	Metre	30.00								
	b) 20 mm dia nominal bore	Metre	10.00								
126	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	Each	1.00								
	BRASS FITTINGS.										
127	Providing and fixing brass bib cock of approved quality										
	15mm nominal bore	Each	4.00								
128	Providing and fixing brass stop cock of approved quality										
	a) 15mm nominal bore	Each	4.00								
129	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :										
	a) 15mm nominal bore	Each	2.00								
130	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :										
	a) 15mm nominal bore	Each	2.00								
	b) 20mm nominal bore	Each	1.00								
	CHAMBERS										
131	Constructing masonry Chamber 60x45x50 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :										
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	15.00								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
132	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work										
	20mm diameter pipe	Metre	50.00								
133	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Per litre	1000.00								
	DRAINAGE										
134	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars Jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of Joints etc. complete										
	150 mm dia. RCC pipe	Metre	100.00								
135	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :										
	Inside size 90x80 cm and 45 cm deep including providing andfixing at the site precast concrete manhole cover with steel fiber of IS marked conforming to IS :12592 part I of HD 20 with matching frame of class HD 20 IS 12592 part II with 875 mm external dia. and clear 560 mm internal dia.										
	With Sewer bricks conforming to IS:4885	Each	6.00								
136	Construction of brick masonry circular manhole 3'-00" interanal dia (0.91 m) at bottom and 1' - 10" (0.56 m dia) at top upto I.L 3 ft or 0.91 m. Built in brickwork with extruded burnt sewer bricks) in FPS Size) conforming to IS-4885 -1988 incurved on plan in cement mortar 1:4 (1 cement : 4 coarse sand) excluding excavation, but including 9" or (0.23 m) thick founding concrete 1:3:6 (1cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) including fixing SFRC manhole cover and frame (Heavy Duty) 560 mm internal dia . fixed in cement concrete 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and 12 mm thick plaster in side and outside with cement mortar 1:4 (1 cement : 4 coarse sand) and inside plaster to be finished with a floting coat of neat cement. Making necessary channel concrete 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) all complete as per departmental drawings and as directed by Engineers-in-charge. Note: 1) Cement require 2.68 Quintals / Each. 2) Cost of manhole frame and cover shall be paid seprately.	Each	3.00								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
137	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	2.00								
138	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design										
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	30.00								
139	Constructing brick masonry chamber for underground CI inspection chamber and bends with 75 class designation bricks in cement mortar 1 : 4 (1 cement : 4 coarse sand) CI cover with frame (light duty) 455 x 610 mm internal dimensions, total weight of cover with frame to be not less than 38Kg. (weight of cover 23 Kg. and weight of frame 15Kg.) RCC top slab with 1:2:4 mix (1cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size) foundation concrete 1:5:10 (1 cement :5 fine sand :10 graded stone aggregate 40mm nominal size.) inside plastering 12mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc., complete as per standard design.										
	Inside dimensions 455 x 610 mm and 45 cm deep for single pipe line										
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	5.00								
140	Supply and apply a chemical resistant, water based, solvent free, odourless epoxy resin protective coating approved for portable water reservoirs by roller/spray Primer+2Sealcoat.Consumption=0.2Kg./m2/Coat.ProductcomplieswithUS-FDA:175-300.Should beresistant to chemicals such as chlorine and have life of about 5years.	Sqm	51588.50								
141	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 Kg./Cum."Excess/ less cement used as per design mix is payable/recoverable separately). (For Screed)										
	All work upto plinth level	Cum	50.00								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
142	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by percussion drilling using Direct mud circulation (DMC) or Bailer and chisel technique by tripod and mechanical Winch Machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured up to bottom of pile cap):.										
	600 mm dia	Metre	1170.00								
	Miscellaneous										
143	Disposal of moorum/ building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-Charge	Cum	21084.05								
144	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead as per direction of Engineer-in-charge.										
	In cement mortar	Cum	100.00								
145	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 Metres lead as per direction of Engineer - in- charge.	Cum	3158.05								
	SUB TOTAL PART B :										
	Part (C) ROAD RESTORATION (DMC ROAD)										
1	Preparation and consolidation of subgrade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50 m.	Sqm	2852.16								
	CC Road										
2	Providing and laying 75 mm thick compacted bed of dry brick aggregate of 40 mm thick nominal size including spreading, well ramming, consolidating and grouting with jamuna sand, including finishing smooth etc. complete as per direction of Engineer-in-charge.	Sqm	2852.16								

Schedule No. 1(a)- Design-Build : Civil Works											
Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
3	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction /expansion, construction & longitudinal Joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling Joints with approved Joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of Joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note:- Cement content considered in M-30 is @ 340 Kg./Cum. Excess/less cement used as per design mix is payable/ recoverable separately.										
	Cement Concrete Prepared with Batch mix Machine	Cum	427.83								
4	Steel Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete .										
	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg.	1647.40								
	SUB TOTAL PART C :										
	Part (D) DESIGN SERVICES										
1	Preparation & Finalization of Service Improvement Plan(SIP) with Design Services.	Job	1								
2	Cost of Survey and Site Investigation.	Job	1								
	SUB TOTAL PART D :										
	TOTAL OF Total of Schedule NO. 1 (a) i.e. TOTAL OF PART A TO D										
	<i>Signature of Bidder</i>										
	<i>Name & Designation</i>										
	<i>Company</i>										

Schedule No. 1(b)- Design-Build : Electromechanical Works

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
PART A- MECHANICAL WORKS											
1	Horizontal Split Casing Pumps :										
	Supply installation testing & commissioning of approved make Horizontal Split Case pump set of given capacity and head with suitable rating of 3.3 KV motor, complete set as per relevant IS and as per technical specification. The works include all accessories as require for complete installation of pump set.										
1.1	2084 m3/hr,34m, (4W + 2S) - For Line -3 (Towards Peera Garhi)	Nos	6								
1.3	2605 m3/hr,26m, (4W + 2S) - For Line -1 (Towards Burari-A) & Line -2 (Towards SGT Nagar)	Nos	6								
2	DI Pipes - Suction, Delivery pipe line works for Pump House										
	Supply installation testing & commissioning of D.I. K-9 grade pipes double flanged with internal cement mortar lining and external Zinc Coating etc. complete as per - IS: 8329-2000 Latest Version. The pipe works includes Lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type accessories as require for complete installation.										
2.1	600mm dia	m	72								
2.2	700mm dia	m	282								
2.3	800mm dia	m	36								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
3	DI Fittings & Specials - Suction & Delivery pipe line works for Pump House										
	Supply installation testing & commissioning of D.I. K-9 grade pipes fittings & specials double flanged as per - IS: 9523-2000 Latest Version. The pipe works includes lowering, laying and jointing in position including cost of all labour, jointing material, including nut bolts and giving satisfactory hydraulic testing, etc. complete as per instructions of Engineer in charge. The works include all accessories as require for complete installation.										
3.1	Above 600mm dia.	Kg	13993								
4	M.S Pipes - Delivery header pipe/rising main line works for Pump House										
	Supply installation testing & commissioning of Mild Steel Pipes fabricated/manufactured out of MS plate of steel grade Fe 410 as per IS 3589:2001 or out of HR coils of same/equivalent grade;internally lined with cement mortar lining confirming to IS 3589:2001 and having external/outside 4mm coal tar coating and wrapping confirming to IS 10221-2008; The pipe works includes Lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type accessories as require for complete installation.										
i)	1500mm dia	m	95								
ii)	1400mm dia	m	20								
iii)	1100mm dia	m	20								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
5	Steel Specials fabricated										
	Supply installation testing & commissioning of Mild Steel specials fabricated /manufactured out of MS plate of steel grade Fe 410 as per IS 3589:2001 or out of HR coils of same/equivalent grade;internally lined with cement mortar lining conforming to IS 3589:2001 and having external/outside 4mm coal tar coating and wrapping conforming to IS 10221-2008; complete in all respect. The pipe works includes Lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type accessories as require for complete installation.										
i)	Above 600mm dia.	Kg	7241								
6	Sluice valve - Motorised										
	Supply installation testing & commissioning of ISI mark DI/SG iron D/F motorised Sluice valves (PN 1.0) of approved makes & conforming to IS 14846 and as per technical specification. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing, etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
6.1	600mm dia	Nos	6								
6.2	700mm dia	Nos	12								
6.3	800mm dia	Nos	6								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
7	Butterfly valve - Electrical										
	Supply installation testing & commissioning of ISI mark DI/SG iron D/F motorised Butterfly valves (PN 1.0) of approved makes & confirming to IS 13095 and as per technical specification. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing, etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
7.1	1500mm dia	Nos	4								
7.2	1400mm dia	Nos	1								
7.3	1100mm dia	Nos	1								
8	SS Expansion Bellows										
	Supply installation testing & commissioning of SS Expansion Bellows (PN 1.0) of approved make & confirming to latest IS code and as per technical specification. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc.complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation..										
8.1	600mm dia	Nos	6								
8.2	700mm dia	Nos	12								
8.3	800mm dia	Nos	6								
8.4	1100mm dia	Nos	2								
8.5	1400mm dia	Nos	2								
8.6	1500mm dia	Nos	5								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
9	Non Return Valve										
	Supply installation testing & commissioning of double flanged Swing check type valves PN-1.0 of approved make confirming to IS-5312 part-1 and as per technical specification. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
9.1	600mm dia	Nos	6								
9.2	700mm dia	Nos	6								
9.3	1100mm dia	Nos	1								
9.4	1400mm dia	Nos	1								
9.5	1500mm dia	Nos	1								
10	Kinetic Air Release Valve										
	Supply installation testing & commissioning of approved make Double flanged Kinetic Air Release valve confirming to IS -14846 and technical specifications with isolating sluice valve and all accessories for installation on pump delivery header line for following sizes. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
10.1	200 mm dia PN-1	Nos	3								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
11	EOT Crane										
	Supply installation testing & commissioning of approved make EOT Crane with geared travelling trolley complete with manually operated chain pulley block, long travel rail track (40 mm sq.bar),moving or cross girder,brake, safety devices etc as per technical specifications and complete in all respect as per the direction of the Engineer. The works includes all labour, jointing material, nut & bolts and giving satisfactory testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation										
11.1	5 T Capacity for pumps, Line -3 (Towards Peera Garhi)	Nos	1								
11.2	5 T Capacity for pumps, Line -1 (Towards Burari-A) & Line -2 (Towards SGT Nagar)	Nos	1								
12	De-watering & Sump Pumps										
	Supply installation testing & commissioning of approved make submersible pump set having suitable motor working on three phase 50 Hz , 415 v + 10 % , with DOL starter, cable, GI medium duty delivery pipes, specials, suction strainer etc. complete set as per relevant IS and as per technical specification. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
12.1	5m ³ /hr, 15m head	Nos	2								
12.2	50m ³ /hr, 15m head	Nos	2								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
13	Ventilation System										
	Supply installation testing & commissioning of Heavy duty capacitor start 900/1400 RPM single phase ISI marked Exhaust fan, IS:2312 marked in existing opening including making connections testing etc. as required. The works includes putting in position including cost of all labour, jointing material, nut & bolts and giving satisfactory testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
13.1	300 mm sweep(900/1400 RPM)	Nos	30								
14	Fire Fighting System										
	Supply installation testing & commissioning of ISI marked 4 kg capacity Dry Powder fire extinguisher with high pressure discharge hose, squeeze gripe nozzle 120 gms carbon dioxide cartridge, gun metal cap with initial charge of dry power. Both extinguisher and dry powder to be ISI marked.										
14.1	4 kg capacity	Nos	12								
15	Sluice Gate - Manual										
	Supply installation testing & commissioning of approved make CI Sluice gate manually operated wall thimble mounted type conforming to IS:13349 and as per technical specification. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type of preparatory works, dismantling & shifting of existing gates etc to suitable storage/staking place (as directed by Engineer In-charge) for complete installation.										
15.1	1500mm x 1500mm	Nos	11								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
16	Surge Protection System										
a)	Surge Vessel										
	Supply installation testing & commissioning of Surge Air Vessel with all instrumentation, fabricated with Boiler quality steel plate shell & dish ends, dye penetration test during welding, full radiography (10%) of welded joints, hydraulic testing, pneumatic testing, cleaning of the air vessel, sand blasting, painting of two coat of primer for both inside & outside surfaces. two coat of food grade epoxy paint for inside surface average painting DFT 250 micron and two coat of aluminium painting to the out side surface average painting DFT 80 micron. The works includes handling, cost of all labour, jointing material, including nut bolts and giving satisfactory testing, etc. complete as per instructions of Engineer in charge. The works include all accessories as require for complete installation.										
i)	For 1500mm dia - Line -3 (Towards Peera Garhi) - Tentative capacity of vessel – 63 cum	Set	2								
ii)	For 1400mm dia - Line -1 Towards Burari-A) - Tentative capacity of vessel – 80 cum	Set	1								
iii)	For 1100mm dia – Line -2 (Towards SGT Nagar) - Tentative capacity of vessel – 90 cum	Set	1								
b)	Air Compressor										
	Supply installation testing & commissioning of approved make Air Compressor of suitable capacity as per relevant IS and as per technical specification. The works includes handling and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation. Air Compressor with all accessories.										
i)	For 1500mm dia - Line -3 (Towards Peera Garhi) - of suitable capacity	Nos	2								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
ii)	For 1400mm dia - Line -1 Towards Burari-A) - of suitable capacity	Nos	2								
iii)	For 1100mm dia – Line -2 (Towards SGT Nagar) - of suitable capacity	Nos	2								
c)	Control Panel										
	Supply installation testing & commissioning of approved make Control Panel as per relevant IS and as per technical specification. The works includes handling, satisfactory testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
i)	For 1500mm dia - Line -3 (Towards Peera Garhi) - of suitable capacity	Nos	1								
ii)	For 1400mm dia - Line -1 Towards Burari-A) - of suitable capacity	Nos	1								
iii)	For 1100mm dia – Line -2 (Towards SGT Nagar) - of suitable capacity	Nos	1								
d)	Air Cushion Valve										
	Supply installation testing & commissioning of approved make Air Cushion valve confirming technical specifications with isolating sluice valve and all accessories for installation on rising main for following sizes. The works includes lowering, laying and jointing in position including cost of all labour, jointing material, nut & bolts and giving satisfactory hydraulic testing etc. complete as per instructions of Engineer in charge. The works include all type of accessories as require for complete installation.										
i)	200mm dia - For Line -3 (Towards Peera Garhi)	Nos	7								
ii)	200mm dia - For Line -1 Towards Burari-A)	Nos	8								
iii)	200mm dia - For – Line -2 (Towards SGT Nagar)	Nos	10								
SUB TOTAL PART A - Mechanical Works											

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
PART B	ELECTRICAL SYSTEM										
1.0	11 kV 'HT Switchgears										
	Supply, installation, testing & Commissioning of 11 kV HT Panel comprising of 2 nos. 630A VCB I/C, 1 no. 630A VCB B/C & 4 nos. 630A VCB O/G with all necessary indications, metering and protection as per SLD	Set	1								
2.0	3.3 kV 'HT Switchgears										
2.1	Supply, installation, testing & Commissioning of 3.3 kV HT Panel comprising of 2 nos. 630A VCB I/C, 1 no. 630A VCB B/C & 25 nos. 630A VCB O/G with all necessary indications, metering and protection as per SLD	Set	1								
2.2	SITC of 3.3 kV Automatic power factor correction panel comprising with APFC relay, capacitor banks,contator,indicating lamp, power factor meter, free standing made of sheet steel enclosed, aluminium bus bar, earthing pads, complete with power & control wiring and suitable to improve the power factor of the system not less than 0.98 lag.	Set	2								
2.3	Nutral Grounding Resistance panel for 11 kV/3.3 kV , 5000 kVA Transformers.	Set	2								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
3.0	HT & LT Transformers										
3.1	Supply, Installation, Testing and commissioning of copper wound ISI marked Transformer 11/3.3 KV, Three Phase, 50 Hz, DYN 11, ONAN type , Standard accessories like, conservator, Silicagel breather, radiator, fins, HT & LT cable end boxes or Bus Duct flange, Lifting lugs, Bi-directional Plain/ Flanged Rollers, Earthing terminal, Air release plug. Off load tap changer (+5% to -10% in steps of 2.5%), winding / Top oil temperature rise of 45°C/40°C, ISI marked drain valves, Dial type temperature gauge, first fill oil, Epoxy based paint etc having max. total losses as per energy efficiency level - 2 at basic Insulation level conforming to IS 2026 (Part- I to Part - II),/latest applicable IS code and as per the following continuous rating										
3.1.1	5000 KVA	Nos.	2								
3.2	Supply, Installation, Testing and commissioning of copper wound ISI marked Transformer 3.3 KV/0.415kV, Three Phase, 50 Hz, DYN 11, ONAN type , Standard accessories like, conservator, Silicagel breather, radiator, fins, HT & LT cable end boxes or Bus Duct flange, Lifting lugs, Bi-directional Plain/ Flanged Rollers, Earthing terminal, Air release plug. Off load tap changer (+5% to -10% in steps of 2.5%), winding / Top oil temperature rise of 45°C/40°C, ISI marked drain valves, Dial type temperature gauge, first fill oil, Epoxy based paint etc having max. total losses as per energy efficiency										
3.2.1	125 kVA	No.	2								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
4.0	415V LT PANEL										
4.1	Supply, installation, testing & Commissioning of Main LT Panel comprising of 2 nos. I/C and 1 Bus Coupler and feeders as designated in the SLD with all necessary indications, metering and protection as per the specifications. The panel shall be made of 2.0 mm thick CRCA steel sheet with the doors and gland plate being of a 3.0 mm thick CRCA steel. The panel shall have proper rubber gasketing and louvers for heat discipation. The panel shall be IP 54. Hinges to be provided for lifting the panel. The panel shall have base plate so that it can be floor mounted as well. Scope includes GI supports for installation of switchboard, danger board, etc.	Set	1								
5.0	3.3 kV Soft Starters										
	SITC of Soft Starter with panel supplied by manufacturer conforming to applicable standards with logic inputs & outputs, relay outputs and analogue outputs, plug in I/O connections, display of electrical parameters, state of load & operating time, RS 485 serial link for connections to Modbus										
5.1	For 250 kW motor	Nos.	6								
5.2	For 275 kW motor	Nos.	6								
6.0	110V DC System with 400 AH Ni-Cd battery	Set	1								
6.1	Supply of 110V/400Ah SMF NI, Cad. Battery with Battery Set Battery Rack Set of Inter cell, Inter-bank connectors with Manufacturing & Supply of Float cum boost Charger Input 415VAC output 110V,100A/115A suitable for Ni Cad. Battery110V/400Ah And DCDB consist of MCB 25A, 2P,10KA input & , 8nos O/G MCB 10A 2P,10KA.	Set	1								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
7.0	Cable and Cable accessories										
	HT Power Cable										
7.1	Providing & Laying XLPE insulated IS:7098/II/85 of approved make H.T.cable for working voltage 11 K.V.Earthed with Stranded Compacted Circular Aluminium Conductor, Conductor Screened with Extruded Semi-conducting compound, XLPE Insulated, Insulation Screened with extruded semi-conducting compound in combination with Copper Tape, cores laid up, inner sheath of Thermoplastic tape, galvanised flat steel strip armoured and overall Extruded PVC Type ST-2 Outer Sheathed cable direct in ground including excavation of 30cmx100cm size trench, 25cm layer of river sand, second Class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc.as required of size.										
7.1.1	3CX240sqmm, AL, 11kV	Mtr.	140								
7.1.2	3CX300sqmm, AL, 3.3 kV	Mtr.	2475								
7.2	LT Power Cable										
	Providing & Laying XLPE insulated / P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-I/1554-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, second Class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.										
7.2.1	3.5C-300 sq mm, Al, 415V, 1.1 kV	Mtr.	50								
7.2.2	4Cx16sqmm, AL, 415V, 1.1 kV	Mtr.	125								
7.2.3	4Cx10sqmm, AL, 415V, 1.1 kV	Mtr.	580								
7.2.4	3Cx6sqmm, AL, 415V, 1.1 kV	Mtr.	300								
7.2.5	3Cx2.5 sqmm, Cu, 415V, 1.1 kV for Actuators	Mtr.	2250								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
7.3	Control Cable										
	Providing and laying XLPE/PVC insulated & PVC sheathed armoured control cables of 1.1 KV grade with copper conductor as per IS 1255 including excavation of 30 CmX75 Cm size trench 25 Cm thick under layer of sand and second class bricks covering, backfilling & compaction										
7.3.1	2Cx2.5 sqmm, for Space Heater	Mtr.	2160								
7.3.2	3Cx2.5 sqmm, for Dewatering Pumps	Mtr.	300								
7.3.3	14 C x 2.5 sq.mm	Mtr.	100								
7.4	Cable termination kit										
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.										
7.4.1	3.5C-300 sq mm, AL, 415V, 1.1 kV	Nos.	2								
7.4.2	4Cx16sqmm, AL, 415V, 1.1 kV	Nos.	8								
7.4.3	4Cx10sqmm, AL, 415V, 1.1 kV	Nos.	42								
7.4.4	3Cx6/3Cx10sqmm, AL, 415V, 1.1 kV (22 mm Dia)	Nos.	4								
7.4.5	3Cx2.5 sqmm, Cu, 415V, 1.1 kV-14mm /2Cx6(19mm)	Nos.	40								
7.4.6	2Cx2.5 sqmm, Cu, 415V, 1.1 kV-14mm/ 2C-6 19mm	Nos.	36								
7.4.7	14Cx2.5 sqmm, Cu, 415V, 1.1 kV-23m/25mm	Nos.	4								
	Supplying and making cable end terminations with cast resin compound, including lugs and other jointing materials, for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required.										
7.4.8	3CX240sqmm, AL, 11kV (Indoor)	Each	16								
7.4.9	3CX300sqmm, AL, 3.3kV (Indoor)	Each	60								
7.5	Cable trays										
	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required.										

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
7.5.1	600mm x 50mm x 2.0 mm	Mtr.	0								
7.5.2	450mm x 50mm x 2.0 mm	Mtr.	370								
7.5.3	300mm x 50 mm x 1.6 mm	Mtr.	60								
7.5.4	150mm x 50mm x 1.6 mm	Mtr.	30								
8.0	Earthing and Lightning Protection System										
8.1	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.	Set	12								
8.2	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.										
8.2.1	50mm x 5mm G.I. Strip	Mtr.	200								
8.2.2	32mm x6mm G.I. Strip	Mtr.	300								
8.2.3	25mm x 5mm G.I. Strip	Mtr.	50								
8.2.4	6 SWG G.I. Wire	Mtr.	100								
9.0	Lightning Protection										
9.1	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I.	Each	4								
9.2	Supply & laying of 20x3 mm GI Strip as ring conductor & downconductor	Mtr.	150								
10.0	Indoor and Outdoor Illumination System										
10.1	80 W LED Light for Medium Bay Luminaires for Pump House' with acrylic/ prismatic front cover(Bajaj Cat.-BGPPN-80W LED) or equivalent.	Nos.	40								
10.2	40 W LED having Innovative and compact structure of the luminaire for general purpose lighting having potential of energy saving up to 70% for MCC room Lighting.	Nos.	36								
10.3	Recess mounting white powder coated CRCA housing with LEDs plane front frame with acrylic drop light dissipator fixed to the housing, convex acrylic diffuser with 2x2 luminaires.(Bajaj cat.-BXTBLR#^ WH) or eq. for SCADA room Lighting	Nos.	6								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
10.4	80 W Specially designed LED Floodlight luminaire with advanced optical system in order to provide Improved lighting level for saving of energy up to 50% (BAJAJ Cat.-BARFEP 80 W LED) or Eq.	Nos.	4								
10.5	90 W Street Lighting Fixtures with pressure die cast Aluminium housing. Bajaj cat-BRTFG 90W LED) or eq.	Nos.	6								
10.6	Integral Pole Mounted decorative LED Post Top Luminaires with IP-65 protection. BAJAJ Cat.-BLPTSP 10WLED) or eq.	Nos.	4								
10.7	30 W LED Solar Street Light Luminaires suitable for three days complete with Solar panel, Solar low maintenance battery, GI Battery Box and six meters high G.I.Pipe Pole. (BAJAJ Cat-FALCON SOLAR LUMINAIRE 30W) or eq.	Nos.	4								
10.8	Battery Operated Emergency Light (10% of total light fixtures will be operated with substation battery.)										
10.9	Supply and erection of Steel Tubular pole of following length and dimension as per table-3 with base plate on the cement concrete foundation of M-15 /M-20 grade (1:1.5:3) with the help of anchor bolts of grade 6.8 (IS 1367 P III). The pole shall be made of S-355JO grade steel sheet , folded lengthwise to obtained Octagonal shape, having single longitudinal seam weld and hot dipped galvanised internally & externally in accordance with IS 2629. The pole shall have a weatherproof flush door and locking arrangements. The complete work shall be supervised and certified by the manufacturers for satisfactory supply, erection, testing and commissioning. The pole shall be completed with overhangs, Junction Box, two nos. pipes for cable entry and outgoing, wires up to lighting Fixtures.										
10.9.1	9 Mtr.	Nos.	4								
10.9.2	7 Mtr.	Nos.	6								
10.9.3	4.5 Mtr.	Nos.	4								

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
11.00	Miscellaneous Items										
	P & F double ball bearing capacitor start ceiling fan of approved make complete with regulator and other accessories as required. (for estimation purpose only)										
11.1	1400 mm sweep	Nos	6								
11.2	SITC of 1.5 ton Air Conditioner complete with all accessories as required. (for estimation purpose only)	Nos.	2								
11.3	Electric Shock Treatment Chart	nos.	10								
11.4	Rubber Mats for installation in front of HT/ LT Panels	nos.	34								
11.5	Caution Boards	nos.	10								
	Sub Total of Part B - Electrical Works										
PART C	Instrumentations for CWPS-SINGLE RESERVOIR										
1.0	Providing, installation, testing and commissioning of Diaphragm Type Pressure Gauges Dial size 150 mm	No.	36								
2.0	Providing, Installation, Testing and Commissioning of PRESSURE TRANSMITTER for Water Application: Range: 0-10 Bar	No.	21								
3.0	Providing, Installation, Testing and Commissioning of ULTRASONIC LEVEL TRANSMITTER for Water Application (0-8 Mtr.) :	No.	6								
4.0	Providing, Installation, Testing and Commissioning of CHLORINE ANALYSER for Water Application: Transmitter : Range: 0.05 to 2ppm,	Set	3								
5.00	Providing, Installation, Testing and Commissioning of MAGNETIC FLOW METER at each Pump house for outlet lines.										
5.1	Outlet-800	No.	1								
5.2	Outlet-1100	No.	1								
5.3	Outlet-1200	Nos.	2								
	Sub Total of Part C - Instrumentation Works										

Item No.	Description	Unit	Quantity	Currency of Choice	Basic Price (Supply) (Currency of Choice)	Freight & Insurance (INR)	Construction, Installation, Testing and Commissioning (INR)	Import Duty (Customs / any other tax) (INR)	Total Price		GST (INR)
									Total Price LC (INR)	FC Component (Currency)	
PART D	SCADA for Complete Package										
1.00	Supply of Instrument control panel along with PLC/SCADA System with HMI and associated software & hardware, printer, modem ups etc. for 3 nos of Clear water Pump House.	Set	1								
Sub Total of Part D - SCADA Works											
TOTAL OF Schedule NO. 1 (b) i.e. TOTAL OF PART A TO D											
Total of Schedule 1 i.e. Total of Schedule 1(a) and 1 (b) (Carried to Schedule 6, Summary)											

Signature of Bidder

Name & Designation

Company

Schedule No. 2 : Other Services

Item	Description	Total Price in LC (INR)
(1)	(2)	(3)
(i)	Provisional sum for the Employer's share of the Dispute Adjudication Board	1,00,00,000
(ii)	Provisional sum for the Auditing Body described in Schedule 6 to Section 8	1,00,00,000
(iii)	Provisional sum for other services described in Bid document	2,95,48,000
(iv)	Compliance with Environmental Management Plan (EMP) (To be quoted by Bidder)	
Total of Schedule No. 2 Carried to Schedule No. 5, Summary		

*Signature of Bidder**Name & Designation**Company*

Schedule No. 3: Operation Services						
Item	Description	Unit	Quantity	Unit Rate (INR)	Total Price in LC (INR)	GST (INR)
	Operation Services Fee					
	After Final Taking Over Date					
i	Year 1	ML	1,99,301			
ii	Year 2	ML	2,01,110			
ii	Year 3	ML	2,02,902			
iv	Year 4	ML	2,04,711			
v	Year 5	ML	2,06,519			
vi	Year 6	ML	2,08,328			
vii	Year 7	ML	2,10,137			
viii	Year 8	ML	2,11,929			
ix	Year 9	ML	2,13,737			
x	Year 10	ML	2,15,546			
Total of Schedule No. 3 Carried to Schedule No. 5, Summary						

Signature of Bidder

Name & Designation

Company

Schedule No. 4: Daywork Rates

Item	Description	Unit	Nominal Quantity	Unit Price (INR)	Extended Amount (INR)	GST (INR)
1	Labour					
(a)	Unskilled Labour (man)	Man Day	100			
(b)	Unskilled Labour (Woman)	Man Day	50			
(c)	Tradesmen's helper	Man Day	50			
(d)	Carpenter and joiner	Man Day	50			
(e)	Plumber	Man Day	50			
(f)	Bricklayer	Man Day	50			
(g)	Pipe Layer	Man Day	50			
(h)	Electrician	Man Day	50			
(i)	Fitter	Man Day	50			
(j)	Mason	Man Day	50			
(k)	Bar benders and fixers	Man Day	50			
(l)	Watchman	Man Day	50			
(m)	Ganger	Man Day	50			
(n)	Chainmen and other personel to assist Engineer's staff	Man Day	50			
(o)	Gas cutter	Man Day	50			
(p)	Welder	Man Day	50			
(q)	Field Technician	Man Day	50			
(r)	Leakage Engineer	Man Day	50			
	Total for Dayworks (Labour)					
	(Carried forward to Daywork Summary)					
2	Materials					
(a)	Diesel engine oil	Litre	1000			
	Total for Dayworks (Materials)					
	(Carried forward to Daywork Summary)					

Schedule No. 4: Daywork Rates

Item	Description	Unit	Nominal Quantity	Unit Price (INR)	Extended Amount (INR)	GST (INR)
(1)	(2)	(3)	(4)	(5)	(6) = (4) x (5)	(7)
3	Contractor's Plant & Equipment					
(a)	Portable compressor with one tool and required length of hose- 3 m ³ /min capacity	Hour	100			
(b)	Mobile crane-5 to 10 tonnes capacity	Hour	50			
(c)	Dumper/Tipper -5m ³ capacity	Hour	50			
(d)	Generating set – 6 KW	Hour	50			
(e)	Electric welding set including ancillary equipment and consumables	Hour	50			
(f)	Oxy-acetylene gas cutting/gauging	Hour	30			
(g)	Loading shovel – 1m ³ capacity	Hour	30			
(h)	Dewatering pump with required suction hose, foot valve and strainer, delivery hose etc.					
	(i) 5 HP	Hour	50			
	(ii) 7.5 HP	Hour	50			
	(iii) 15 HP	Hour	50			
	(iv) 30 HP	Hour	10			
(i)	Concrete mixer 0.4 m ³ capacity	Hour	100			
(j)	Data logger complete with pressure transducer and cables	Hour	100			
(k)	Pick-up vehicle or similar (for field team)	Hour	150			
	Total for Dayworks (Contractors Plant and Equipment)					
	(Carried forward to Daywork Summary)					

*Signature of Bidder**Name & Designation**Company*

	Description	Amount (INR)	% Foreign	GST
1	Total For Daywork : Labour			
2	Total for Daywork : Material			
3	Total for Daywork : Contractors Plant and Equipment			
	Total for Daywork (Carried to Schedule No. 5, Summary)			

Signature of Bidder

Name & Designation

Company

Schedule No. 5 : Summary of Bill of Quantities

Schedule No. No.	General Summary	Page	Amount		GST
			Foreign Currency (Currency of Choice)	Local Currency (INR)	Local Currency (INR)
1	Design Build-Civil and Electro mechanical Works				
2	Other Services				
3	Operation Services				
4	Dayworks				
	Total of Schedule No. 1 to 4 Bid Price (Without GST) to be carried forward to Letter of Bid				

Note:- *Bidders may note that the Cost of Guaranteed Power Consumption and life cycle cost of Operation and maintenance calculated as per procedure stipulated at ITB 36.6 will be added to the Bid Price (Design Build costs) to obtain the Evaluated Bid Price upon which the decision for award of contract will be based*

Signature of Bidder

Name & Designation

Company