

**SECTION IV****SCHEDULE OF RATES AND QUANTITIES****Tender No.:** M-TSK-2026-21**Name of Work:** Construction of 100 KLD ETP waste water recycling plant on turnkey basis for reuse of discharge water of Mechanized Laundry, DBRG with operation and maintenance for 2 years at Dibrugarh Coaching Depot of Tinsukia Division.**Total Value:** ₹ 2,17,72,840.34 (Rupees Two Crore Seventeen Lakh Seventy Two Thousand Eight Hundred Forty And Thirty Four Paise Only)**Completion Period:** 30(Thirty) months from the date of issue of LOA.

SN.	SR Item	Description of Item	Unit	Quantity	Rate (₹)	Total Cost (₹)
<b>Schedule A: Cost of Supply, Installation, Erection, Commissioning, Operation and Maintenance of the plant for a period of two years after commissioning of 100 KLD ETP.</b>						
1		Basic supply price for 100 KLD treated effluent Recycling Plant as per Scope Of Supply	Job	1	1,07,17,046.08	1,07,17,046.08
2		Charges for full Erection & Commissioning For ETP and Water Treatment Plant	Job	1	8,61,400.00	8,61,400.00
3		Civil foundation work without building & shed Appx.	Job	1	19,23,315.83	19,23,315.83
<b>Total Schedule A</b>						<b>1,35,01,761.91</b>
<b>Schedule B: Civil Work</b>						
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth, lead up to 50m and lift up to 1.5m as directed by Engineer-in-Charge				
	2.6.1	All kinds of soil	Cum	350	177.50	62,125.00
2	16.64	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 Local sand, including finishing smooth etc. complete as per direction of Engineer-in-charge.	Sqm	180	199.35	35,883.00

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3	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.2	1:1.5:3 (1 Cement: 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	12	8,340.85	1,00,090.20
	4.1.3	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	30	7,878.50	2,36,355.00
4	5.33	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
	5.33.1	All works upto plinth level				
	5.33.1.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum	150	9,504.75	14,25,712.50

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	5.33.2	All works above plinth level upto floor V level				
	5.33.2.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum	15	9,860.40	1,47,906.00
5	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	15000	107.85	16,17,750.00
	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	50	392.15	19,607.50
6	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	Sqm	300	842.50	2,52,750.00
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	80	736.40	58,912.00
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	80	961.30	76,904.00
7	6.13	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.				
	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm	110	1,123.80	1,23,618.00
8	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
	10.16.1	Hot finished welded type tubes	Kg	3000	194.40	5,83,200.00

9	12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	110	738.65	81,251.50
10	12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :				
	12.51.1	Ridges plain (500 - 600mm)	Metre	13	532.35	6,920.55
11	13.1	12 mm cement plaster of mix :				
	13.1.1	1:4 (1 cement: 4 fine sand)	Sqm	220	347.05	76,351.00
12	13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :				
	13.7.2	1:4 (1 cement: 4 fine sand)	Sqm	110	425.55	46,810.50
13	10.5	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				

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	10.5.1	Using M.S. angels 40x40x6 mm for diagonal braces	Sqm	4	5,804.35	23,217.40
14	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
	13.47.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	Sqm	300	171.10	51,330.00
15	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	300	262.70	78,810.00
16	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having				

		flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks)	Sqm	110	1,355.80	1,49,138.00
17	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.-External work				
	18.9.5	40 mm nominal dia Pipes	Metre	100	563.05	56,305.00

18	21.1	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) :				
	21.1.1	For fixed portion				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	100	530.90	53,090.00
19	21.1.2	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)				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	100	634.45	63,445.00
20	21.3	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-				

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		charge . (Cost of aluminium snap beading shall be paid in basic item):				
	21.3.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	Sqm	20	1,176.80	23,536.00
Sub-total Schedule B						54,51,018.15
Add CPWD Escalation @ 29.62%						16,14,591.58
<b>Total Schedule B</b>						<b>70,65,609.73</b>
<b>Schedule C: Electrical Work</b>						
<b>Part A: Provision of Power Supply</b>						
1		Supply, installation, testing and Commissioning of Distribution Transformer , 100 KVA, 11/0.433KV, 50C/s BIS-LEVEL-I, Aluminium Wound, ONAN, Vector group-Dyn-11with first filling of Transformer oil as per IS 335 and all Standard accessories .	Nos	1	2,89,843.00	2,89,843.00
2		Supply erection of GI tubular pole 11 Mtrs long similar to Nezone Cat No SP-55	Nos	1	45,678.00	45,678.00
3		Supply, Fitting, fixing of GI channel 100x50x6 mm 2500 mm long with necessary clamps size 50x6 mm for Tubular pole , drilling of holes and all accessories forTransformer DP Structure.	Nos	6	1,142.00	6,852.00
4		Supply, fitting, fixing of 11 KV GODO 400 Amps switch complete.	Nos	1	18,297.00	18,297.00
5		Supply, fitting, fixing of 11 KV LA set 9 KV (RMS) , discharge capacity 10 KA .	Set	1	2,967.00	2,967.00
6		Earthing by 50 mm dia, 3.6 mm thickness 3 Mtrs long GI pipe and 6 SWG GI wire as per Drawing No PCEE/ELG/DRG/2024/1 Dtd 30.09.2024	Nos	8	4,143.00	33,144.00



7		Supply, installation, testing and commissioning of LT outdoor type panel board With the following: Incoming (i) MCCB, 125 Amps, 4 Pole 25 KA BC= 1 Nos (ii) Bus bar 250 Amps AL Outgoing: (iii) MCCB, 100 Amps, 4 Pole 25 KA BC= 2 Nos (iv) MCCB, 63 Amps, 4 Pole 25 KA BC= 3 Nos	Nos	1	88,424.00	88,424.00
8		Supply, laying, testing and commissioning of LT XLPE armoured Aluminium cable 4 core 120 SQ mm including cable laying by excavation of earth , making of cable trench and refilling as required.	Mtrs	50	2,940.00	1,47,000.00
<b>Sub-total Schedule C (Part A)</b>						<b>6,32,205.00</b>
<b>Part B: Electrification of ETP Shed</b>						
1		Supply, laying, testing and commissioning of LT XLPE armoured Aluminium cable 4 core 70 SQ mm including cable laying by excavation of earth , making of cable trench and refilling as required.	Mtrs	100	1,943.00	1,94,300.00
2		Supply, laying, testing and commissioning of LT XLPE armoured Aluminium cable 4 core 25 SQ mm including cable laying by excavation of earth , making of cable trench and refilling as required.	Mtrs	100	909.00	90,900.00
3		Supply . Fitting, Fixing of Horizontal TPN MCB DB with the following (i) MCCB TPN 100 Amps=1 No (ii)MCB DP 63 Amps= 2 Nos, (iii)MCB DP 32 Amps=4 Nos	Sets	1	34,388.00	34,388.00
4		Supply , fitting fixing of SPN MCB DB DD 8 Way with MCB DP 16 Amps =4 Nos	Sets	2	6,910.00	13,820.00
5		Supply and fitting , fixing of LED street Light 45 Watt toughened glass cover IP 65 , IK07 with GI clamp for fixing on wall	Nos	10	4,720.00	47,200.00

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6		Supply, fitting, fixing of exhaust fan 300 mm sweep metallic type	Nos	6	1,473.00	8,838.00
7		Supply, Fitting, fixing of concealed type light point wiring by 1.5 sq. mm copper cable through PVC pipe	Nos	16	654.00	10,464.00
8		Supply, Fitting, fixing of concealed type fan point/ Exhaust wiring by 1.5 sq. mm copper cable through PVC pipe with 1 mm sq. Green colour cable for earth continuity wire	Nos	12	945.00	11,340.00
9		Supply, Fitting, fixing of concealed type 5A Socket point wiring by 1.5 sq. mm copper cable through PVC pipe	Nos	7	428.00	2,996.00
10		Supply, Fitting, fixing of concealed 15A Socket point wiring by 4 sq. mm copper cable through PVC pipe	Nos	8	1,230.00	9,840.00
11		Supply, laying of 6.0 Sq mm FRLHS single core copper cable	Mtrs	270	200.85	54,229.50
12		Supply, laying of 4.0 Sq mm FRLHS single core copper cable	Mtrs	360	131.55	47,358.00
13		Supply, laying of 2.5 Sq mm FRLHS single core copper cable	Mtrs	540	88.13	47,590.20
<b>Sub-total Schedule C (Part B)</b>						<b>5,73,263.70</b>
<b>Total of Schedule C</b>						<b>12,05,468.70</b>
<b>Total (Schedule A+ Schedule B+ Schedule C)</b>						<b>2,17,72,840.34</b>

**Note:**

1. Quantities shown above are only estimated quantities. The actual quantities may increase or decrease as per requirement. The contractor shall have no claim in the event of less / excess quantities being offered. The payment will be made upon actual work done.
2. Contractor should quote as *Rs. /Unit* on the schedule.
3. The rate quoted should be inclusive of GST applicable during the contract period. Railways shall not be liable for any increase in the taxes or duties levied by the Government or Local bodies which shall have to be borne by the contractor during the contract period.
4. The rates quoted by the contractor shall be the cost of completed work and shall include the cost of all labours and materials including transport, loading and unloading as well as sheds, tools and plants and temporary works or whatever arrangements required for the satisfactory completion of

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the work. All tools, form works and other temporary work and arrangements put in by the contractor and for which no separate payments is made to him/them on satisfactory completion of the work shall remain the property of the contractor.

5. Contractor will be required to ensure that payment made to personnel engaged is not below the prevailing Labour Rate, and this payment is to be made through bank.
6. The rate quoted shall include PF, ESI and Bonus payable if any to the staff as per existing guidelines, if applicable.