

Name of Work :- Additional & Alternation of Lift Work in Truma Building at G.G.Hospital at Jamnagar, Dist: Jamnagar.

SCHDULE - B

Memorandum showing items of works to be carried out

It No.	SOR No.	Quantities estimated but may be	Item of Work	Estimated Rates		Unit	Total Amount According to estimated
				In Figure Rs. Ps.	In Words		
1	2	3	4	5	6	7	8
1	1-2-1.	10.00	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	539.34	Rupees Five Hundred Thirty Nine and Paisa Thirty Four Only	Pt.	5393.40
2	1-2-4.	3.00	Point wiring for on board Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate modules erected on / in wall / ceiling with following type accessories Cat. III	309.06	Rupees Three Hundred Nine and Paisa Six Only	Pt.	927.18
3	1-4-1.	120.00	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling , with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (B) 2 wire 2.5 sq. mm	104.03	Rupees One Hundred Four and Paisa Three Only	Mtr.	12483.60
4	2-15-1	5.00	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.9, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt, LED driver efficiency > 85 % (fitting required LM-79 & LM-80 Certificates) (A) Tube Light with integral/ non-integral driver (iii) 18-20 Watts, Surge - 2KV,IP-20, conventional 4 feetCat-III	295.93	Rupees Two Hundred Ninety Five and Paisa Ninety Three Only	Ea.	1479.65
5	2-15-2	3.00	Supplying and erecting led lamps with following wattage capacity of 220 to 240 voltage, minimum 15000 burning hours life, 500 V in built-surge protection,Polycarbonate diffuser, mounting suitable for E14 / E27 / B22 lamp holders, pf >= 0.5 (A) LED Lamps integral type, with PC diffuser suitable LAMP holder (ii) 5 to 8 watts Cat-III	112.11	Rupees One Hundred Twelve and Paisa Eleven Only	Ea.	336.33

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6	4-3-3.	80.00	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (C) 3 1/2 core 50 Sq. mm (25 Sq.1/2 mm core)	341.38	Rupees Three Hundred Fourty One and Paisa Thirty Eight Only	Mtr.	27310.40
7	4-6-3.	2.00	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (B) 3 & 1/2 core 50 Sq. Mm	75.75	Rupees Seventy Five and Paisa Seventy Five Only	Ea.	151.50
8	4-7-1.	8.00	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (D) 50 Sq.mm.	20.20	Rupees Twenty and Paisa Twenty Only	Ea.	161.60
9	3-12-1.	2.00	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (ii) 40Amps. DP Cat. III	2458.34	Rupees Two Thousand Four Hundred Fifty Eight and Paisa Thirty Four Only	Ea.	4916.68
10	3-12-2.	1.00	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (iii) 63 Amps. FP Cat. III	3344.11	Rupees Three Thousand Three Hundred Fourty Four and Paisa Eleven Only	Ea.	3344.11
11	3-11-2.	1.00	Plastic enclosure fitted with DIN rail suitable for incorporating One / Two nos. MCB	52.52	Rupees Fifty Two and Paisa Fifty Two Only	Ea.	52.52
12	3-11-3.	1.00	Plastic enclosure fitted with DIN rail suitable for incorporating Three /Four nos. MCB	108.07	Rupees One Hundred Eight and Paisa Seven Only	Ea.	108.07
13	3-10-1.(B)	8.00	Providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat III	123.22	Rupees One Hundred Twenty Three and Paisa Twenty Two Only	Ea.	985.76
14	3-11-5.	1.00	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	1492.78	Rupees One Thousand Four Hundred Ninety Two and Paisa Seventy Eight Only	Ea.	1492.78

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15	3-12-3.	1.00	Supplying & erecting approved make RCCB + MCB (Electro magnetic type only) working on residual current device having 10 KA short circuit breaking capacity and 30 mAmp. Sensitivity & 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed [b] 32A / 40A, 2 pole Single Phase Cat. II	2139.18	Rupees Two Thousand One Hundred Thirty Nine and Paisa Eighteen Only	Ea.	2139.18
16		1.00	[f] 63A, 4 pole Three Phase Cat. II	3117.87	Rupees Three Thousand One Hundred Seventeen and Paisa Eighty Seven Only	Ea.	3117.87
17	3-14-10	2.00	Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [B] For Electrical installation up to 11 KV located in other than normal soil i.e. Soft Rock, Marshy Soil etc. -Length of Pipe : 2 mtr -Back filling Compound :1 no. Bag of 25 Kg	7095.25	Rupees Seven Thousand Ninety Five and Paisa Twenty Five Only	Ea.	14190.50
18	1-4-4	30.00	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. (g) One wire 16.00 sq. Mm	177.76	Rupees One Hundred Seventy Seven and Paisa Seventy Six Only	Mtr.	5332.80
19	5-3-4.	1.00	Supplying & erecting single phase approved make industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM [B] 380 mm dia 900 RPM Cat.II	2740.13	Rupees Two Thousand Seven Hundred Fourty and Paisa Thirteen Only	Ea.	2740.13

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20	5-3-8.	1.00	Providing recess in wall or window frame suitable for erection of Exhaust fan complete with plastering and colour washing to match the colour of the wall or window complete with expanded metal in order to render the fitting in accessible and the room water-proof.	189.88	Rupees One Hundred Eighty Nine and Paisa Eighty Eight Only	Ea.	189.88
21	3-1-6.	1.00	Providing Approved make Triple Pole Metal / Iron Clad Switch & Fuse with neutral link 415/500 V confirming to IS (a)63A Cat.III	1977.58	Rupees One Thousand Nine Hundred Seventy Seven and Paisa Fifty Eight Only	Ea.	1977.58
22	3-1-7.	1.00	Erection & connection Charges for 63A/100A TP as following (a) on existing wooden block / A.I.frame	65.65	Rupees Sixty Five and Paisa Sixty Five Only	Ea.	65.65
23	13-1-AP		Supplying, Erecting, Testing & Commissioning the passenger / stretcher lift having following main features: [1] GEAR LESS LIFT DRIVE (MR) comprising of High Starting torque Lift 3 phase 440 V A. C. Permanent Magnet Synchronous motor of proper rating with high efficiency shall be used.[2] Micro processor based / PLC, ACVVVF, vector control drive with encoder feedback closed loop system shall be used for lift car and door operation which shall be full collective selective operation hall call demand response, UP/DOWN hall stops, Main, Up/ Down Contactor with overload and phase reversal relay and safety controls. [3] Car with M S platform with bracings of adequate size and to sustain the impact load cabin + passenger with safety factor of fire for steel and side panels of Stainless steel of sheet of grade 304 duty. Car ceiling will be S.S. finishes with aesthetic appearance with LED ceiling lights. Car flooring shall be of anti skid PVC with choice of colour of engineer in charge. Car doors shall be of stainless steel grade 304, hairline finish with centre opening / telescopic automatic doors. Car panel will also be S.S. 304 finished with emergency stop device, mechanical door safety device, facility of auto/ attended mode. All car panel buttons and all floor switches must be with brail language as per lift act.				0.00

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	Conti.		<p>[4] All landing doors must be fire rated for 2 hour shall be fully automatic centre opening/ telescopic opening made of hairline finish steel grade of 304 with key holes and infrared curtains with Unlocking facility from outside</p> <p>[5] Appropriate battery operated emergency light in the car along with alarm switch shall be provided. Also, Emergency Light & Fan should start immediately without any Time Delay as soon as power fails.</p> <p>[6] Digital scrolling indicator system for up-down arrow along with floor position indicator shall be provided inside the car and at all floors.</p> <p>[7] Full height infra red curtain with multiple cross / crossing light beams shall be provided.[8] Automatic Rescue Device (ARD) shall be provided accordingly of passenger capacity with Manual Rescue Operation (Manual Cranking Facility).</p> <p>[9] Audio visual indication in the lift car showing over loading shall be provided such that doors kept open till excess load is removed. [10] Spring buffers/PU Buffers shall be provided.</p> <p>[11] Car fan as per passenger capacity with automatic sleep timer shall be provided.</p> <p>[12] Voice annunciator with suitable music shall be provided in lift car.</p> <p>[13] Self diagnostics system for operational and safety parameters shall be provided in control panel.</p> <p>[14] Mechanical over speed governor with governor calibration as per actual site parameters and submission of calibration certificate submission, door key holes in the floor doors, fireman switch shall be provided.</p> <p>[15] Lift machine hoisting arrangement in the lift machine room and monkey ladder for lift pit should be provided by the lift agency, along with the other steel structure works, foundations for the machine etc...</p>				0.00

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	Conti.		<p>[16] In the hoist way fascia plate shall be provided without any extra cost, where ever required as / if directed by engineer in charge.</p> <p>[17] Permanent wiring with necessary safety devices like RCCB in all circuit, Over Voltage Under Voltage protection and THD eliminator in circuit for lift machine room and lift well with proper numbers of light points, with fixtures, exhaust fan and plug points shall be provided by the agency. Only 3 phase Power Supply shall be made available by department in lift machine room. Necessary Earthing as per Lift Act/Rules shall be arranged by Lift Agency.</p> <p>[18] Any civil/ electrical works for additional and alteration in lift shaft and machine room related to erection of lift shall be made by lift agency without any extra cost. (granite/marble fixing around all landing door openings are not in lift agency's scope.)</p> <p>[19] Agency has to provide all working drawings and documents and liaison services for obtaining all necessary permission from lift inspector and other authorities. [20] acrylic transparent licence/display A4 size holder in lift car [20A] As per statutory requirement of Govt. Of Gujarat lift & escalator act 2000, lift agency has to provide</p> <ol style="list-style-type: none"> 1. Car top safety barricade 2. Push & talk communication system. 3. Fireman's switch operation at Ground Floor. 4. carrying out third party lift inspection during/after lift erection and provide report by third party authorized by concern licensing authority 5. agency has to provide third party insurance upto completion of free maintenance period and submit the document for the same. 				0.00
	Conti.	1.00	<p>[21] Car Panel Operating Buttons with floor position indicator/buttons must be of Auto Glow type clearly visible when view from inside cabin.</p> <p>[22] For Physically Handicapped person Full Length Handrails of hairline finish steel grade of 304 should be provided at appropriate height on the Rear & Side Wall Panels in Lift Car. 15/16 Passengers, Ground plus 2 upper floor with Rated Speed of 1.0 m/sec., (B) With General Specification attached herewith. Cat.III</p>	1613005.35	Rupees Sixteen Lacs Thirteen Thousand Five and Paisa Thirty Five Only	Ea.	1613005.35

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24	MR	1.00	Minor Civil Work(like Demolation RCC/Masonry Work, New Brick Work/ RCC Wall, Foundation work,Plaster work,Tiles Work,Excuation Work,Door/Window/Ventilation Work etc. as per instruction by incharge Engineer) For 01 No. Lift (15/16 Passanger Ground plus 2 upper floors) and Lift Cabin	200000.00	Rupees Two Lacs Only	Job.	200000.00
Total Amount in Rs							1901902.52
			CREDIT OF DISMENTLING MATERIALS				
Dismantaling Material Amount of Rs. 52000.00 Deducted From First R.A. Bill OR First and Final Bill.							
25	As Per R & B GR	1.00	Dismental Material : 4/5/6 Passanger Ground plus 2 upper floors All Type of Lift Old Material with removing charges. The Dismantling material will be the property of contractor	-52000.00	Rupees Fifty Two Thousand Only	Job.	-52000.00
Dismantaling Material Amount							-52000.00
I / We am/are willing to carry out the work at _____ % Above / Below percent (Should be written in figures and words) of the Estimated rates mentioned above. Amount of my/our tender works out as under.							
Estimated Amount put to tender					Rs.		
Add/Deduct _____ % above/ below					Rs.		
Net Amount					Rs.		
In words Rupees Seventy Two Lacs Nineteen Thousand Seventy Only							
Note :							
1	All works shall be carried out as per Public Work Department Handbook and other specification of Division or as directed.						
2	All the columns in Schedules should be filled in ink and the total of the entries ink last column should be struck by the contractor under his signature						
3	Rates quoted include clearance of site (prior commencement of work and at its close). In all respect and hold good for work under all condition, site, moisture, weather etc.						
4	Serviceable material available (if any) after Demolishing / Dismantalling any item should be hand over to the concerned PIU Site Engineer In Charge as per instruction.						

Signature of Contractor with seal

Signature of the Contracting Authority with seal :

Asst. Engineer (Ele.)
P.I.U. Jamnagar

Dy. Executive Engineer (Ele.)
P.I.U. Jamnagar

Executive Engineer (Ele.)
P.I.U. Zone I & II Rajkot