

**Name of Work :- Construction of Lift Well in Existing Building Of Family Court At  
Dahod Dist. Dahod**

**SPECIFICATION INDEX**

<b>It. No.</b>	<b>Description of Item</b>	<b>Applicable specification reference</b>
1	Excavation for foundation upto 1.5 m depth (Executed With Manual Labour) including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(A) Loose or soft soil	As per Separate Sheet attached.
2	Excavation for foundation for depth from 1.5 m to 3.0 mt (Executed With Manual Labour) including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(A) Loose or soft soil	As per Separate Sheet attached.
3	Providing and laying controlled cement concrete M.150 for curing complete excluding cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete	As per Separate Sheet attached.
4	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in. (A) Foundation footing, base of columns & mass concrete.	As per Separate Sheet attached.
5	Providing and laying cement concrete 1:3:6 (1-Cement : 3- coarse sand : 6-hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	As per Separate Sheet attached.
6	Providing and Laying controlled cement concrete M-250 & curing complete including the cost of form work but excluding cost of reinforcement concrete work in Beams, Girders and Cantilever up to floor for PLINTH BEAMS	As per Separate Sheet attached.
7	Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. in foundation and plinth in Cement Mortar 1:5. (1-Cement : 5 -fine sand)(B) Conventional	As per Separate Sheet attached.
8	Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 20 cm.in depth consolidating each disposed layer by ramming and watering.	As per Separate Sheet attached.
9	Applying general insecticide pest control treatment to floors, cupboards etc including labour materials etc. complete. Using Imidacloprid 30.5 SCas Per IS 6313 part -II( 0.075% concentration by mass) is recommended 10.5ml chemical diluted with 5 liters of water application 0.5 litre chemical /Sqm of surface is recommended as per I.S.	As per Separate Sheet attached.
10	Providing and Laying controlled cement concrete M-150 and with curing etc.complete. Including the cost of formwork but excluding the cost of reinforcement for R.C.C Plinth Slab	As per Separate Sheet attached.
11	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork but excluding reinforcement for reinforced concrete work in (C)Slabs, landing, shelves, Balconies, Lintels, Beams, Girders and Cantilever Beams at FF	As per Separate Sheet attached.
12	Providing and Laying controlled cement concrete M-250 and curing etc.comp including the cost of formwork but excluding the cost of reinforcement for Vertical Fins All Floor	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
13	Providing and Laying controlled cement concrete M-250 Finishing smooth with curing etc.comp including the cost of formwork but excluding the cost of reinforcement for RCC work in SLAB at FF level	As per Separate Sheet attached.
14	Providing ISI Mark T.M.T. bar Fe - 500D reinforcement for R.C.C work including bending, binding and placing in position complete. For All Floor	As per Separate Sheet attached.
15	Brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg./Sqcm. in super structure in cement mortar 1:5 (1 cement : 5 fine sand) Work In Super Stcture above plinth Level up to floor two level including the cost of all materials and labour charges etc. complete.	As per Separate Sheet attached.
16	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished with floating coat of neat cement slury (i) Cement mortar 1:3 (1-cement:3-sand)	As per Separate Sheet attached.
17	Providing and applying on wall exterior/ interior of Heritage surface texture granules finish of Bakelite Hylam Limited (No.21-3005, 3006, 3007, 3008, 3013, 3014, 3015 and 3016) trowelled over 20 mm thick sand faced cement plastered (Two coat of 12 mm in CM 1:3 & 8 mm coat in CM 1:1) sub strata to get an average finish coat thickness of 0.08 to 1.2 mm comprising of three components viz. Dry granules, Granules, bonding agent and top coat of glossy finish (Dry granules shall be made from Silica sand, pigments, chiefly inorganic) homopolymer emulsion mix etc, of Bakelite Hylam product banding agent made of acrylic copolymer emulsion, broad specturm fungicide of Bakelite Hylam product etc and top coat made from solvent based acrylic polymer of Bakelite Hylam product including scaffolding.	As per Separate Sheet attached.
18	Providing and Fixing Machine Cut free edges,Pre Mirror Polished Green Marble Stone slab 16mm to 18 mm thick in single peace) for For Doors & windows sill,jambs & Cledding as per design incl. full moulded round front edge and 1cm both side nosing on 20 mm thick cement mortar 1:6 (1 -cement : 6 coarse sand) jointed with grey cement slurry including rubbing, polishing & Finishing etc. complete	As per Separate Sheet attached.
19	Providing and fixing safety grills of Required pattern for Windows,Door using required size of MS polished bars at specified spacing innserted and welded from inside to rectangular box type frame CRC Pipes of Required Size at required spacing as per design and hold fasting with coach bolts including one coat of primer and two coats of mattfinished oil painting etc complete	As per Separate Sheet attached.
20	Providing and laying water proofing tretment with chaina mosaic tiles flooring over avg 40 mm C.C. 1:2:4 {1 Cement : 2 sand : 4 Kapachi / Gritt 6 to 12 mm size} bedding for maintaining slope for plain and curve surface & 12 mm to 20 mm of broken piece of seramic / glazed tiles ( one for more color as directed ) to be laid over cement mortar bedding of C M 1:3 (1 cement : 3 sand ) containg one Kg of water profing materials per bag of O P C at plain or / and slops and to be tempered to bring mortar eramic up to surface with using white cement and colour pigment including rounding of junctions and extending them up to 15 cm along the wall and curing with bends any pattens or design as per drawing and cleaning by using oxalic acid etc complete.	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
21	Wall painting (Two coats) with plastic emulsion paint of approved brand and manufacture on undecorated wall surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth. including Applying two coats of Birla or Asian acrylic lapy ( putty) & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.	As per Separate Sheet attached.
22	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(G)110 mm	As per Separate Sheet attached.
23	SIGNAGES ON WALL Providing, Fabricating & Fixing wall signage's using 304 grade Stainless steel brushed steel finish plate of 1.5 mm thick fixed on a wall using s.s studs including punched (laser cut) lettering carried out on s.s plate of required size and text as directed by Engineer over the S.S plate etc complete.	As per Separate Sheet attached.
24	Providing and fixing in position collapsible steel shutters with vertical channels 20 x 10 x 2 mm braced with flat iron diagonals 20 x 5 mm size with top and bottom rails of T_rin 40x 40 x 6 mm with 38mm dia, steel pulleys complete with bolts, nuts, locking arrangements, stoppers handles including applying a priming coat of red lead paint.	As per Separate Sheet attached.
25	Providing & fixing of reinforcement bars ( reinforcement bars shall be paid extra under relevant item of work ) after drilling the hole of required diameter & depth ,cleanning of the same ,providing /filling the hole with Injection Mortar (HIT HY 150 of Hilti or pproved equivalant ),inserting reinforcement bar etc. complete dSper Manufacturers & architects instruction.The work shall be carried out by the technical workmens/agency approved by the manufacturer and under technical supervision of Manufacturer of Injection grout including all materials,tool tackles ,labour etc.complete. (a) 10/12 mm. dia.bar -Holes 14mm/16mm dia Depth 300 mm	As per Separate Sheet attached.
26	Demolition of Brick work and stone masonry including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift.(ii) In Cement Mortar.	As per Separate Sheet attached.
27	Dismantling doors, windows, ventilators etc. (wood or steel) shutters including chowkhats architraves, holdfasts and other attachment etc. complete and stacking them within all lead and lift.(ii) Exceeding 3 Sq.M. in area	As per Separate Sheet attached.
28	Demolition including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift. (i) R.C.C. work	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
29	<p>Supplying, Erecting, Testing &amp; Commissioning the passenger / stretcher lift having following main features: [1] GEAR LESS LIFT DRIVE (MRL) 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 s/s 304 chaker plate design sugested of engineer in charge. 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,</p>	As per Separate Sheet attached.
	<p>All car panel buttons and all floor switches must be with brail language as per lift act.</p> <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 &amp; 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.</p> <p>[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.</p>	As per Separate Sheet attached.
	<p>[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> <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>	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
	<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, plug points and appropriate rating 3-ph Servo controlled voltage Stabilizer 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.</p> <p>[20] acrylic transparent licence/display A4 size holder in lift car</p>	As per Separate Sheet attached.
	<p>[20A] As per statutory requirement of Govt. Of Gujarat lift &amp; escalator act 2000, lift agency has to provide</p> <ol style="list-style-type: none"> <li>1. Car top safety barricade</li> <li>2. Push &amp; talk communication system.</li> <li>3. Fireman's switch operation at Ground Floor.</li> <li>4. carrying out third party lift inspection during after lift erection and provide report by third party authorized by concern licensing authority</li> <li>5. agency has to provide third party insurance upto completion of free maintenance period and submit the document for the same.</li> </ol> <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 &amp; Side Wall Panels in Lift Car.</p> <p>[23] With Necessary KVA rating voltage controlled Stabilizer suitable for your controller, drive and all equipments of lift.</p> <p>[24] Necessary rating of DP Elcb and FP Elcb required for lift is in scope of work which rating is suggested by CEICED Department (electrical Inspector)</p>	As per Separate Sheet attached.
	<p>(B) SPECIAL FEATURES DESCRIPTION OF LIFTS for PREMIUM category</p> <ol style="list-style-type: none"> <li>1. Advanced control system dual 64 bit embedded microprocessor with CANBUS Serial Communication mode including Regenerative power efficient operation, on site programming facility, Anti nuisance, Pte-opening, BMS/RMS with necessary online real time monitoring system having necessary connectivity for remote monitoring &amp; other suitable supporting hardware &amp; software devices to fulfil the purpose.</li> <li>2. Floor Indication LCD Display with call registration &amp; brail mark with arrival gong and hall lantern &amp; TFT Screen in the car with MP3 Voice Announcer.</li> <li>3. CAR Panel should be Scratch resistive SS Moonrock finish / Hair Line / Honeycomb for car and all Doors, All landing doors must have fire rating up to 2 hours and car door must have multi-level crisscross beam door protection.</li> <li>4. To &amp; fro communication system &amp; wiring (i.e. car, control room &amp; guard room ) and Each elevator are equipped with remote monitoring system. agency has to provide mobile app and user id and password for monitoring.</li> </ol>	As per Separate Sheet attached.
	<p>8 / 10 Passengers, Ground plus 1 upper floor with Rated Speed of 1.0 m/sec., (C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. [13-1-Q] [Make: - OTIS, Schindler, TK Elevator, KONE, Mitsubishi]</p>	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
30	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, (A) 3 1/2 core 25 Sq. mm ( 16 Sq. mm 1/2 core) [4-3-3]	As per Separate Sheet attached.
31	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V having normal current rating up to 25 A to 100A with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only, Cat III [3-4-1]	As per Separate Sheet attached.
32	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V having normal current rating up to 25 A to 100A with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only, Cat III [Add Rs. 10% extra for housing/Encloser of MCCB] [3-4-1]	As per Separate Sheet attached.
33	Providing and, fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (A) 3 & 1/2 / 4 core 25 Sq. mm [4-6-3]	As per Separate Sheet attached.
34	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. (C) 16/25 Sq.mm. [4-7-1]	As per Separate Sheet attached.

Deputy Executive Engineer  
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