

**Name of Work :- Construction of New Pashu Davakhana at Janod Ta.
Balasinor Dist. Mahisagar**

SPECIFICATION INDEX

It. No.	Description of Item	Applicable specification reference
1	Excavation for foundation upto 1.50 mt depth including sorting out and stacking of useful materials and disposing the excavated stuff for all lead and lift for all sorts of soil.	As per Separate Sheet attached.
2	Excavation for foundation from 1.50 mt to 3.00 mt. depth including sorting out and stacking of useful materials and disposing the excavated stuff with all lead and lift for all sorts of soil.	As per Separate Sheet attached.
3	Providing and laying cement concrete work 1:2:4 (1- Cement : 2- Coarse sand : 4 graded stone aggregates 20 mm nominal size) and curing complete excluding cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, base or columns and mass concrete.	As per Separate Sheet attached.
4	Providing and laying controlled cement concrete M-250 and finishing smooth with curing etc complete, including the cost of formwork but excluding the cost of reinforcement for R.C.C. work in Foundations, footings base of columns & mass concrete.	As per Separate Sheet attached.
5	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 Columns, pillars, posts & struts upto floor two level for G.F.	As per Separate Sheet attached.
6	Providing and laying controlled cement concrete M-250 and finishing smooth with curing etc. complete including the cost of formwork but excluding the cost of reinforcement for R.C.C. work in Plinth beams.	As per Separate Sheet attached.
7	Filling available excavated earth (excluding rock) in trenches plinth side of foundation etc. in layer not exceeding 20 cm in depth consolidation each deposited layer by ramming and watering etc. complete.	As per Separate Sheet attached.
8	Filling in foundation and plinth with murrum or selected soil in layers of 20 cm thickness including watering, ramming and consolidating etc. complete.	As per Separate Sheet attached.
9	Filling in plinth with sand under floors including watering, ramming, consolidating and dressing complete.	As per Separate Sheet attached.
10	Anti-Termite System:Providing and laying of permanent piping technology anti-termite treatment before flooringwork by installing LLDP (Low linear density polyethylene)tube of 8 mm O.D. & 6.4 mm 1.D. with inbuilt pressurecompensation chip every 30 cm interval in the tube,having working pressure of 2 Kg/cm ² and release rate of 1.9 ltr/hour fixed by P-clips and nails. The LLDP pipeshall be installed at the entire periphery of the buildingand at internal network of building at a depth of 20 to200 mm under floor at every 2 to 3 mtr. c/c distance(adjusted as per building layout) & Ends of loop passthrough a PVC elbow of minimum 32 mm ID at junctionbox of wall and floor level, entering into a steelreinforced grooved flexible pipe of minimum 22 mm IDleading into junction box and the loops shall terminate injunction boxes & test every junction during injectingchemicals for termite control treatment. The anti termitechemical Imidacloprid 30.5% SC mix as per IS-6313(part III) shall be injected by the pressure pump dilutedwith water @ 10.5 ml/5 ltr of water at the rate of 2Kg/sq.cm @ 5 Ltr/SMT. The contractor shall submitapproved line plan for piping system and junction boxesdully approved by Engineer-in-Charge with bond of 5year warranty.(i)Anti Termite chemical injected area(Chemical injecting incl. labour cost)	
11	Providing and laying damp proof course 25mm thick cement concrete 1:2:4 (1-cement : 2 coarse sand : 4 stone aggregate 10 mm nominal size) and curing complete	As per Separate Sheet attached.

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12	Providing and laying brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg./Sq.cm. in super structure above plinth level and up to floor two level in cement mortar 1:6 (1 cement : 6 fine sand) including the cost of all materials and labour charges etc. complete.	As per Separate Sheet attached.
13	Providing and laying brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg/sq.cm. in super structure above floor two level in cement mortar 1:6 (1 cement : 6 fine sand) for Ground Floor including the cost of all materials and labour charges etc. complete.	As per Separate Sheet attached.
14	Providing and laying brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg/sq.cm. in super structure above floor two level in cement mortar 1:6 (1 cement : 6 fine sand) for First Floor including the cost of all materials and labour charges etc. complete.	As per Separate Sheet attached.
15	Providing and laying half brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg/Sq.cm in cement mortar 1:4 (1 cement : 4 coarse sand) in super structure above plinth level upto floor two level for Ground floor including the cost of all materials and labour charges etc. complete.	As per Separate Sheet attached.
16	Providing and laying cement concrete 1:3:6 (1- Cement : 3- Coarse sand : 6 crushed stone aggregates 20 mm nominal size) and curing complete including cost of formwork in (A) Wall Caps / Coping	As per Separate Sheet attached.
17	Providing and laying controlled cement concrete M-200 and curing etc. complete including the cost of form work but excluding the cost of reinforcement in (C) Slabs landings shelves balconies, lintel -chhaja, beams, girders and cantilever up floor to level. (Lintel)	As per Separate Sheet attached.
18	Providing and laying controlled cement concrete M-200 and curing etc. complete including the cost of form work but excluding the cost of reinforcement in (C) Slabs landings shelves balconies, lintel-chhaja, beams, girders and cantilever up floor to level. (Lintel)	As per Separate Sheet attached.
19	Providing and laying controlled cement concrete M-200 and curing etc. complete including the cost of form work but excluding the cost of reinforcement in (C) Slabs landings shelves balconies, lintel-chhaja, beams, girders and cantilever up floor to level (Chajja).	As per Separate Sheet attached.
20	Providing and laying controlled cement concrete work of M-200 and curing complete including cost of formwork and excluding reinforcement for reinforced concrete work in (E) Staircases excluding landing upto floor two level for staircase in below give fair finish surface.	As per Separate Sheet attached.
21	Providing and laying controlled cement concrete M-200 and curing complete including the cost of formwork but excluding the cost of reinforcement for reinforced concrete work in (D) Columns, pillars posts and struts, upto floor two level for Ground floor.	As per Separate Sheet attached.
22	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Beam upto floor two level for G.F.	As per Separate Sheet attached.
23	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Beam upto floor two level for F.F.	As per Separate Sheet attached.
24	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs, landing, cantilevers upto floor two level for G.F. slab for Grade slab.	As per Separate Sheet attached.
25	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs, landing, cantilevers upto floor two level for G.F. slab	As per Separate Sheet attached.

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26	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs, landing, cantilevers upto floor two level for F.F. slab	As per Separate Sheet attached.
27	Providing I.S.I. Mark T.M.T. bar Fe-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto all floor level.	As per Separate Sheet attached.
28	Providing I.S.I. Mark T.M.T. bar Fe-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level. Extra for additional lift of reinforcing steel for all R.C.C. work above floor two level.	As per Separate Sheet attached.
29	Providing and fixing M.S. Fan clamps type 1 to 16mm dia M.S. bar bent to shape with hooked ends to R.C.C. slabs curing, laying including painting the exposed portion of loops, all as per standard design complete	As per Separate Sheet attached.
30	Providing & fixing 35 mm thick Double shutter flush door solid core finished with both side 1 mm thick lamination both side like 'NOVAPAN 'or equivalent, of natural wood grain shade as approved by this office having telephone black granite 18 mm thick frame with double stone including fixed ventilation above lintel level as per drg and as per the instruction of Engineer in charge. with necessary SS hinges and fixtures etc . complete. (For Main Door)	As per Separate Sheet attached.
31	Providing & fixing 35 mm thick Single shutter flush door solid core finished with both side 1 mm thick lamination both side like 'NOVAPAN 'or equivalent, of natural wood grain shade as approved by this office having telephone black granite 18 mm thick frame with double stone including fixed ventilation above lintel level as per drawing and as per the instruction of Engineer in charge with necessary SS hinges and fixtures etc. complete.	As per Separate Sheet attached.
32	Providing and fixing 30mm thick FACTORY MADE SOLID SINGLE SIDE PRELAM PANEL PVC DOOR SHUTTER consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for stiles, and 15mm x 15mm for top and bottom rails. The M.s.frame shall have coat of steel primers of approved make and manufacture. The M.S. frame shall be covered with 5mm thick heat moulded single side prelam PVC 'C' channel of size 30 x 50mm to form stiles and 5mm thick and 75mm wide single side prelam PVC sheets shall be for the top, bottom and lock rails. Paneling of 5mm thick one side prelam sheet to be fitted in the M.S.frame and sealed to the front (Prelam side) stiles and rails (which should have a 5mm 45 degree bent portion as beading) and attached to the back (white/ivory) stiles and rails (which should have a 10mm 90 degree bent portion as beading) using 2 nos. 15mm wide x 5mm thick PVC sheet beading inside the 9 degree bent beading. All stiles, rails and beading to be joined to the panel using solvent cement. An additional 5mm thick PVC strip of 20mm width is to be struck on the interior side of the 'C' channel using PVC solvent adhesive and 10mm thick (5mm x 20) thick 20mm width cross PVC sheet to be fitted as gap insert for top and bottom rails, etc. complete as per direction of Engineer in charge, manufacture's specification and drawing.	As per Separate Sheet attached.
33	Providing and fixing window having extruded aluminum colour anodized section frame main outer size 95mm x 24mm x 1.17mm (@ Wt. 0.738 Kg/mt), horizontal three track member size 92mm x 31.75mm x 1.30mm (@ Wt. 1.07 Kg/mt), vertical member of size 92mm 31.75mm x 1.50mm (@ Wt. 1.06 Kg/mt) with sliding shutters of horizontal member size 40mm x 18mm x 1.29mm (@ Wt. of 0.456 Kg/mt), vertical member of size 40mm x 18mm x 1.29 mm (@ Wt. of 0.456 kg / mt) with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing including granite frame as per details etc. complete.	As per Separate Sheet attached.
34	Providing and fixing louvered type ventilators with powder coated aluminum fittings and fixtures and Blue glass fixing to adjustable louvers and black granite frame as per details and executed as per directed by Engineer in charge.	As per Separate Sheet attached.

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35	Providing and fixing M.S. hollow section box grills of required pattern to frames of windows or opening etc. with M.S. section of 2.5" x 2.5" square of Tata of jindal section having finish with G.I. coated finish by zinc oxide and oil paint including all labour and material as per directed by engineer incharge.	As per Separate Sheet attached.
36	Providing and fixing M.S. grills of required pattern to wooden / Marble / Granite / Stone frames of windows etc. with M.S. flats at required spacings and frame alround, square or round bars with round headed bolts and nuts or by screws (A) Ornamental Grill.	As per Separate Sheet attached.
37	Providing and laying 24" x 24" vitrified 8 mm thick tiles flooring over 20mm (average) base of cement mortar 1:6 (1 cement : 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finished with flush pointing & cleaning the surface etc. complete for anti skid.	As per Separate Sheet attached.
38	Providing and laying Ceramic tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement. (antiskid)	As per Separate Sheet attached.
39	Providing and laying Marbo Granite tiles 8 to 10 mm thick, 24" x 24" in skirting, risers of steps and dedo on 10mm thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with white cement slurry.	As per Separate Sheet attached.
40	Providing and laying polished Kota stone slab flooring over 20mm (average) thick base of cement mortar 1:6 (1-cement : 6 coarse sand) or L.M. 1.1.5 (1-Lime putty :1.5 - coarse sand) laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. (A) 25mm thick	As per Separate Sheet attached.
41	Providing and laying 18 mm thick machine cut, free edges, machine polished Black Granite tread and risers in single piece with 1 cm nosing and necessary grooves on treads etc. complete.	As per Separate Sheet attached.
42	Providing and laying broken china mosaic flooring for terrace using 12 mm to 20 mm broken pieces of glazed tiles to be laid over cement mortar 1:3 to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall, clearing with water and oxalic acid etc. as directed.	As per Separate Sheet attached.
43	Providing and laying BBCC of 75mm thick layer in CM (1:3) including spraying two coat of water proofing chemical with selected brand by enginner in charge i.e. perma or other with leveling complete for ready base of china mosaic treatment.	As per Separate Sheet attached.
44	Providing and cement vata (10cm x 10cm size) quarter round in cement mortar 1:1 including neat cement finishing watering etc. complete.	As per Separate Sheet attached.
45	Providing 20 mm thick double coat mala cement plasteron interior brick / concrete work for plastering comprising of base coat of 12 mm thick cement plaster in cement mortar (1 Cement : 4 coarse sand) in roughfinishing and 8 mm thick top coat of cement mortar 1:2 (1 Cement : 2 Coarse sand) finished with trovel including scaffolding curing etc. complete.	As per Separate Sheet attached.
46	Providing 15mm thick cement plaster in single coat on brick/concrete walls for interior plastering upto floor two level and finished even and smooth in cement mortar 1:4 (1-cement : 4 sand) for ceiling.	As per Separate Sheet attached.
47	Providing 20mm thick sand faced cement plaster on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3-sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete.	As per Separate Sheet attached.
48	Providing throating or plaster drip and moulding to R.C.C. Chhajja.	As per Separate Sheet attached.
49	Applying two coats of 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.

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50	Applying two coats of 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. (Ceiling Putty)	As per Separate Sheet attached.
51	Wall painting two coats with plastic emulsion paint of approved brand and manufacture on wall surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.	As per Separate Sheet attached.
52	Finishing wall with weather proof exterior emulsion paint on wall surface (two coats) to give an required shape even shade after thoroughly brushing surface to remove all dirt, dust and remains of loose powdered materials etc. complete.	As per Separate Sheet attached.
53	Wall painting two coats with plastic emulsion paint of approved brand and manufacture on wall surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth on ceiling.	As per Separate Sheet attached.
54	Providing, laying and jointing in true line and level I.S.I. mark 40mm dia. U.P.V.C pipe (Sch-40) for cold water including fitting as approved by Engineer in charge. Pipe shall be fixed on the wall with held of clamp at every two meter c/c or shall be concealed as directed including necessary fitting etc. including testing of pipe and joints and fixing the same with adhesive solvent including cost of all materials.	As per Separate Sheet attached.
55	Providing, laying and jointing in true line and level I.S.I. mark 32mm dia. U.P.V.C pipe (Sch-40) for cold water including fitting as approved by Engineer in charge. Pipe shall be fixed on the wall with held of clamp at every two meter c/c or shall be concealed as directed including necessary fitting etc. including testing of pipe and joints and fixing the same with adhesive solvent including cost of all materials.	As per Separate Sheet attached.
56	Providing, laying and jointing in true line and level I.S.I. mark 15mm dia. U.P.V.C pipe (Sch-40) for cold water including fitting as approved by Engineer in charge. Pipe shall be fixed on the wall with held of clamp at every two meter c/c or shall be concealed as directed including necessary fitting etc. including testing of pipe and joints and fixing the same with adhesive solvent including cost of all materials.	As per Separate Sheet attached.
57	Providing and fixing concealed center point to wall, ceiling and floor I.S.I. mark C.P.V.C. (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. (F) 50 mm dia.	As per Separate Sheet attached.
58	Providing and fixing concealed center point to wall, ceiling and floor I.S.I. mark C.P.V.C. (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. (B) 25 mm dia.	As per Separate Sheet attached.
59	Providing, laying and jointing in true line and level I.S.I. mark 110mm diameter U.P.V.C. SWR Type B pipe confirming to IS 13592 -1992 with one end plain and other end socketed with rubbering & fitting confirming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110mm diameter x 149mm length x 145mm high at every 2000mm center to center or shall be concealed in wall as directed including necessary fitting such as bends, shoes etc. including testing of pipe and joints and jointed with adhesive solvent cement including cost of all materials.	As per Separate Sheet attached.
60	Providing and fixing screw down bib taps of following size (A) Brass chromium plated screw down bib tap (i) 15mm dia. as approved by Engineer in charge for all floors.	As per Separate Sheet attached.
61	Providing and fixing screw down bib taps of following size (A) Brass screw down bib tap polished bright (ii) 20mm dia. as approved by Engineer in charge for all floors.	As per Separate Sheet attached.

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62	Providing and fixing pillar tap, capstan head screw down high pressure with screw, shanks and back nuts (B) 20mm dia. as directed by Engineer in charge.	As per Separate Sheet attached.
63	Providing and fixing chromium plated brass half turn flush cock of approved quality including fixing in pipe line etc. complete. (ii) 25mm dia. as directed by Engineer in charge.	As per Separate Sheet attached.
64	Providing and fixing Gun metal check or non return full way wheel valve. 40 mm dia.	As per Separate Sheet attached.
65	Providing and fixing Gun metal check or non return full way wheel valve. (C) 25 mm dia.	As per Separate Sheet attached.
66	Providing and fixing Kitchen sink with C.I. or M.S. brackets, painted white including cutting holes in walls and making good the same but excluding fittings. (C) Vitreous China Sink (i) 600mm x 450mm x 150mm size.	As per Separate Sheet attached.
67	Providing and fixing wash basin with single hole for pillar tap with C.I. or M.S. brackets painted white including cutting holes and making good the same but excluding fittings. (A) Vitreous china (ii) Flat Back washbasin 550 mm x 400mm size. (i) In white colour.	As per Separate Sheet attached.
68	Providing and fixing C.P. brass towel rail complete with C.P. brass brackets fixed to wooden plugs with C.P. brass screws.(B) 600 mm x 20 mm size.	As per Separate Sheet attached.
69	Providing and fixing C.P. brass shower rose with 15mm or 20mm inlet.(A) 100mm dia. each	As per Separate Sheet attached.
70	Providing and fixing 600mm x 450mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet and fixing to wooden plug with C.P. brass screws and washers.	As per Separate Sheet attached.
71	Providing and laying wash down water closet (European type Wall hung W.C. pan) Florentine series FLS-WHT 0111B including providing and fixing metropole flush cock seat cover, jet wash etc. complete unit of jaquar branch (or equivalent) including installing and fitting as per manufacturers standards by skilled trained plumber including testing etc. complete quality and brand as approved by Engineer in charge.	As per Separate Sheet attached.
72	Providing, laying and jointing in true line and level I.S.I. mark 160mm diameter U.P.V.C. (Type B) confirming to IS 13592 -1992 with one end plain and other end socketed with rubbering & fitting confirming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 160mm diameter x 210mm length x 196mm high at every 2000mm center to center or shall be concealed in wall as directed including necessary fitting such as bends, shoes etc. including testing of pipe and joints and jointed with adhesive solvent cement including cost of all materials.	As per Separate Sheet attached.
73	Providing and fixing PVC SWR Nahni Trap IS 14735 for drain with jail of the following nominal diameter of self cleansing design with C.I. screwed down of hinged grating including the cost of cutting and making good the walls. (i) 100mm dia.	As per Separate Sheet attached.
74	Providing and fixing S.W.gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300 mm size (inside) with standard weight (i) square mouth traps (A) 100 mm x 100 mm size P type.	As per Separate Sheet attached.
75	Providing and laying (two level or slopes) and jointing with stiff mixture of cement mortar in proportion 1:1 salt glazed stone ware pipes following nominal internal diameter including testing of pipes and joints etc. complete. 150 mm dia.	As per Separate Sheet attached.

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76	Constructing brick masonry chamber for under ground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg/cm ² in C.M. 1:5 C.I. cover with frame (light duty) 455 mm x 610 mm. internal dimensions, total weight of cover with frame to be not less than 38 Kgs. weight of cover 23 Kg. and wt. of frame 15 Kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm. size) foundation concrete 1:5:10 inside plaster 15 mm. thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls & a bed concrete etc. complete. (i) inside dimension 455mm x 610 mm and 450mm deep for single pipe line.	As per Separate Sheet attached.
77	Constructing Manhole with R.C.C. top slab in 1:2:4 mix (1-cement :2-coarse sand : 4-graded stone aggregate 20mm nominal size) foundation concrete 1:3:6 mix (1-cement : 3- coarse sand :6-Brick bats 40 + 50mm size) inside plastering 15mm thick with Cement Mortar 1:5 (1-Cement : 5-coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1-Cement : 2-Coarse sand :4-stone aggregate 20mm nominal size) finished smooth complete including curing and festing (i) Inside size 900mm x 1200mm and 1.5M. deep including C.I. cover with frame size 560mm diameter total weight of cover and frame to be not less than 128 kgs. (Wt. of cover 64 Kg. and Wt. of frame 64 Kg.) (A) With 230mm thick walls of brick masonry using brick having crushing strength not less than 35Kg. / Sq.cm. in Cement Mortar 1:5 (1- Cement : 5 Coarse sand) (1) A type depth 0.90 Metre for 150mm diameter sewer.	As per Separate Sheet attached.
78	Providing erecting and fixing double coated Syntex or equivalent PVC (I.S.I.) mark water tank of required capacity each with all necessary fittings & connection etc. comp on terrace.	As per Separate Sheet attached.
79	Providing and fixing ball cock of approved quality as directed. (A) Copper metal (i) 25 mm dia.	As per Separate Sheet attached.
80	Providing and fixing 90 cm high Stainless steel railing made from anticorrosive S.S. pipe of 50 mm dia (16 Gauge) as hand rail with S.S. 38 mm dia. (16 Gauge) as a vertical support fixed in RCC slab at 1.2m c/c including three horizontal S.S. pipes of 25 mm dia. (16 gauge) at equal distance fixed by 18.75 mm dia (16 gauge) S.S. pipe including accessories as per detailed drawing as directed etc. complete.	As per Separate Sheet attached.
81	Supplying and fixing the LED acrylic type name panel board as per design approved by Engineer incharge.	As per Separate Sheet attached.
82	Providing and laying sandwich type kitchen platform of size 2.10 x 0.76 x 0.76 m and respected length with dhar polish or moulding having base 4" and support & base with marble or kota as per site requirement also loft and base finish with glaze tile and top with selected shed of marble or granite with gas pipe provision and sink including all fittings, material and labour as per directed by Engineer incharge.	As per Separate Sheet attached.
83	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (A) By manual means in area of light jungle.	As per Separate Sheet attached.
84	Providing & fixing Co2 type portable ABC Dry Powder type ABS Fire extinguisher capacity 4.5 Kg. discharge range 3mt. timing 60 to 180 sec. standard approved IS code No. 2878:2004.	As per Separate Sheet attached.
85	Providing and fixing M.S. grill entrance gate of predetermine design including all material like hinges, roller, stopper, rail head, handle etc having coat of red lead and painting with selected colour guide by engineer incharge.	As per Separate Sheet attached.
86	Providing and fixing precast Rubber dye / steel dye inter locking concrete block 60mm thick with grade of concrete M-300 pneumatic compressed / vibrated mechanically and as per approved design confirming to IS 15658 : 2006 including 35 mm sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC : SP 63-2018 etc. complete.	As per Separate Sheet attached.

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87	Drilling of 215mm dia. bore in over burden strata (0-30) including lowering and fixing of 175 mm nominal dia UPVC pipe/175 mm dia ERW pipe upto required depth and further drilling of 165mm dia bore hole in rocky strata by DTH rig.	As per Separate Sheet attached.
88	Providing & supplying 175mm nominal dia. UPVC "CS" type pipe as per IS:12818 and as per detailed technical specification.	As per Separate Sheet attached.
89	Electric motor driven borewell submersible pump set conforming to I.S. 8034 and motor conforms to IS-9283 working at 3 phase 400/440 volt 50 C/S A.C. supply & 2900 R.P.M. discharge 240 LPM and 72 mtr Head, 7.5 hp Cat. 4.0	As per Separate Sheet attached.
90	SITC of D.O.L starter up to 7.5 H.P.	As per Separate Sheet attached.
91	Providing & supplying Flat PVC cable size 4.0 sq.mm as per IS 694 with BIS mark and as per detailed technical specification.	As per Separate Sheet attached.
92	Heavy duty, 50 mm dia. G.I. Column pipe both end threaded having length approximate 3 mtr. conforming to IS 1239 (Part-1) with coupling at one end.	As per Separate Sheet attached.
93	Providing, supplying and fitting ISI mark CI D/F Sluice Valves as per IS:14846 (Latest Edition) of following class and diameter including all taxes, insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete. PN-1 With hand wheel /cap operated (PD type short body) 50 mm	As per Separate Sheet attached.
94	Providing, supplying & fitting ISI mark CI D/F Reflux Valves as per IS:5312 (Latest Edition) of following class and diameter including all taxes, insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete. Reflux valves PN 1.0 IS 5312 with ISI mark 50 mm	As per Separate Sheet attached.
95	Lowering of Submersible motor pump set complete with required nos and size of Column pipe erected by means of proper chain pulley block & pipe wrenches after checking of threads of each pipe with coupling to take the load of the pumpset and pipe assembly filled up with water with trail testing..	As per Separate Sheet attached.
96	Clamps made from MS plate with 3 holes on either side with nuts & bolts of standard make and suitable size 450 mm x 65 mm x 10 mm flat suitable to 50 mm dia. pipe.	As per Separate Sheet attached.
97	Supply of TOP & BOTTOM accessories of 50 mm dia.	As per Separate Sheet attached.
98	R&B Approved make ELCBs / RCCBs conforming to IS:12640 and having sensitivity of 30 mA and Short Circuit with stand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. 40 Amp. Cat.III	As per Separate Sheet attached.
99	Electrical wiring & fitting charges of electric meter, 40Amp fuse, control panel etc. including erection of the above items on wooden board, cost of material and all liasioning work for getting electric connection from concerned Vij Company.	As per Separate Sheet attached.
100	Pumping test of the tubewell by sub mersible pump of adequate capacity for 165 mm DTH bore.	As per Separate Sheet attached.
101	Providing and fitting readymade prefabricated portable chemicalized ferro concrete mini panel having outer size 110 x 50 x 190 cm with necessary fitting for electric panel mounting complete as per detailed specification and drawing.	As per Separate Sheet attached.
102	Three Phase GEB power charges.	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
103	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg./cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(ii) Inside dimensions 500mm x 700 mm and 450mm deep for pipe line with one or two inlets.	As per Separate Sheet attached.
104	Providing and laying C.I. steps 50cm x 15cm. 2.25cm. and Ci cover suitable frame with necessary fixtures and joint and finish complete. (Including sump step in staggered form including two coat of oil paint)	As per Separate Sheet attached.
105	Providing and fixing of submersible motor of required quality and with control panel of 1.00 HP etc complete with having outlet 25 mm dia.	As per Separate Sheet attached.
106	Providing & fixing to wall, ceiling and floor galvanized mild steel tubes (medium grade) of the following nominal bore, tube fittings and clamps including making good the wall, ceiling and floor (E) 40mm.	As per Separate Sheet attached.
107	Providing and laying cement concrete 1:5:10 (1-Cement : 5 fine sand :10 graded stone aggregate 40mm nominal size) bedding for stoneware pipes of following internal diameters with necessary formwork and curing complete.(B) 150mm dia. (166mm avg. bed thickness)	As per Separate Sheet attached.
108	Extra over item 24.1 for providing salt glazed stoneware fittings. (i) Bends of required degree (any radius) of following nominal diameters. (B) 150mm dia.	As per Separate Sheet attached.
109	Providing and laying marble chips skirting (Terrazo) or dedo rubbed, and polished to Granolithic finish top layer 6mm thick with white, black or white and black marble chips of size from smallest to 4mm nominal size laid in cement marble powder mix 3:1 (3- cement : 1 marble powder by weight) in proportion of 4:7 (4-cement marble powder mix : 7-marble chips by volume) 20mm thick with under layer 14mm thick cement plaster 1:3 (1-cement : 3-coarse sand) (A) Dark shade pigment with ordinary cement (In top layer only)	As per Separate Sheet attached.
110	Excavation for foundation for depth from 3.0 m to 5.0 m including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead (B) Dense or Hard soil.	As per Separate Sheet attached.
111	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.
112	Double half brick thick honey comb brick work with common burnt clay building bricks having crushing strength not less than 35 Kg/Sq.cm. (i) In cement mortar 1:4 (1 cement : 4 coarse sand)	As per Separate Sheet attached.
113	Providing and fixing C.I. Manhole cover 0.60 M. x 0.45M. size having weight not less than 35 Kg.	As per Separate Sheet attached.
114	Providing, laying (to level or slopes) and jointing reinforced concrete light duty non-pressure pipes I.S. class NP-2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete. (B) 150mm	As per Separate Sheet attached.
115	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg/Cm ² in C.M. 1:5 C.I. cover with frame (light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete. (iii) Inside dimensions 600mm x 850 mm and 450mm deep for pipe lines with three or more inlets.	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
116	Providing, laying (to level or slopes) and jointing reinforced concrete light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete. (C) 250mm	As per Separate Sheet attached.
117	Filling in foundation and plinth with brick bats, chhara in layers of 20cm. thickness including watering, ramming and consolidating etc. complete.	As per Separate Sheet attached.
118	Providing and fixing PVC SWR Nahni trap IS-14735 for drain - 75 mm diameter with jali of the following nominal diameter of self cleansing design with C.I screwed down or hinged grating including the cost of cutting and making good the walls.	As per Separate Sheet attached.
119	Providing, fixing and erecting steel shed including M.S. G.I. pipe (class-B), framing of structure with hollow section and painting with two coats of oil paint including priming coat. Rates including with necessary fabrication work including cutting, welding, making holes by drilling machine & fixing in line and level of all structure including cost of all laboures, fixtures, fastening and equipments etc. complete.	As per Separate Sheet attached.
120	Office Table :- 18mm thick three layer pre laminated particle board Work with PVC edge band 2mm thick wrapped around the top, decorative aluminium bidding in top and modesty including all necessary elements with necessary features and fastning finish all as per directed by Engineer in charge. 6 FT Office Table (Dimension :- 180 cm x 90cm x 75 cm) with suitable brand.	As per Separate Sheet attached.
121	Revolving Chair :- Full-Back Executive Office Chair upholstered in bonded leather and PVC, Padded seat and back for all-day comfort and support, Pneumatic seat height adjustment; 360-degree swivel; smooth-rolling casters and having overall dimension 73.9D x 66.5W x 115.6H centimeters with Armrest (Brown) with selected brand.	As per Separate Sheet attached.
122	File Rack :- lack adjustable 5-Shelf Shelving Unit Storage Rack Utility Rack Garage Shelves Display Rack Steel Boltless Rivet Rack, 60 inches Height 1-Pack ({5 - SECTION } 5'[H] x 2'[L] x 1'[D]) with suitable brand.	As per Separate Sheet attached.
123	Visiting Bench :- Chair Three Seater Waiting Area Chair Reception Chair 325-350 Kg Weight Handling Capacity. Durable Parts and support, Our Chairs have whole welded connections. Product dimensions: Length (70 inches), Width (23 inches), Height (31 inches) Color : Shining Silver, Material : Mild Steel (Iron), Finish: Chrome Finish, Style: Contemporary	As per Separate Sheet attached.
124	Steel Stool :- Office Stainless Steel Stool having minimum overall dimension 35.6D x 35.6W x 76.2H Centimeters, made with S.S. leg and rubber pad / bushing with suitable brand which will select by engineer in charge.	As per Separate Sheet attached.
125	Chair :- S.S. Chair for Office having seat and back with selected cushion, Fabric, Pattern, PU with arm rest and minimum overall dimension 78.7D x 41.9W x 78.7H Centimeters with suitable brand which will select by engineer in charge.	As per Separate Sheet attached.
126	Stainless Steel Office Almirah : Supply and installing Portable Modern double Door steel almariah with nearer 30 kg wt having dimension 36 x 18 x 78.5 inch made from SS, Eco friendly and UV resistant in grey color having minimum 4 partition for file rack and other department as per selected and directed by Engineer incharge.	As per Separate Sheet attached.
127	Providing, supplying and fixing the AC of 1.5 tonne of standard company i.e. Blue star, Panasonic or equivalent as per manufacturer specification and select by Engineer incharge	As per Separate Sheet attached.
128	Providing and laying burnt brick masonry for super structure with ordinary portland cement mortar 1:5 proportion including providing scaffolding racking out joints curing etc. complete for all leads and lifts. (Conventional Bricks) upto floor two level	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
129	Providing 20 mm thick sand faced cement plaster with Gutka on walls upto height 10 meters above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1 cement : 3 sand) and 8mm thick finishing coat of C.M. 1:1 (1cement :1 sand) etc. complete including painting with two coats of water proof acrylic emulsion paint to give an even shade.	As per Separate Sheet attached.
130	Providing and laying and fixing 50 mm thick expansion joint by hydro cell semi rigid UV resistance with high performance laminated closed cell polythene foam joint filler in sheet foam as directed etc. complete.	As per Separate Sheet attached.
131	Providing and fixing Barbed wire for Y shape fencing on existing coping / wall, Fencing made of galvanized steel wire of including all material like angle post fixing in wall/coping of a size ISA 45 x 45 x 4 mm (1.5m C/C) with 150 x 150 x 3 mm base plate and anchor bolts M-12 - 4 nos on each plate and 4 nos of barbed wire on each side including ring (9.38 kg/100 Rmt), Plate also covered by CC if required and all section having coat of red lead and painting with selected colour guide by engineer incharge.	As per Separate Sheet attached.
132	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. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete. Cat. III	As per Electrical Specification Book attached.
133	Point wiring for FAN 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 and hum free EME step type electronic fan regulator mounted and accessories with 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 ceiling rose / H.D. Connector as directed. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete. Cat. III	As per Electrical Specification Book attached.
134	Point wiring for Tissino / Modular secondary light point 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, in below type of pipe to be erected complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC / wooden box covered with 3 mm thick PC(Polycarbonate) / Acrylic sheet for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed.(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete	As per Electrical Specification Book attached.
135	Point wiring for Individual Plug with & 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 complete with Modular type switch & 5 pin Plug erected on PVC / Metallic / Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete. Cat. III	As per Electrical Specification Book attached.
136	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	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
137	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge.(3) Two Pin/RJ-11 Telephone Socket [A] For One Gang Cat. III	As per Electrical Specification Book attached.
a	(7) Blank Plate Single Cat. III	As per Electrical Specification Book attached.
b	(8) Computer RJ-45 socket Cat. III	As per Electrical Specification Book attached.
c	(9) 16 Amp. SP one way switch Cat. III	As per Electrical Specification Book attached.
d	(10) 6/16Amp. Universal socket Cat. III	As per Electrical Specification Book attached.
138	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a)20 mm	As per Electrical Specification Book attached.
a	(c) 32 mm	As per Electrical Specification Book attached.
139	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	As per Electrical Specification Book attached.
140	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 in / on wall / ceiling with 2.5 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 (a) 2 wire 4 sq. mm	As per Electrical Specification Book attached.
a	(h) 4 wire 6 sq. mm	As per Electrical Specification Book attached.
141	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. (e) 1.50 Sq.mm 3 core round PVC sheathed	As per Electrical Specification Book attached.
142	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction [C] CAT - 6	As per Electrical Specification Book attached.
143	Supplying & erecting approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in existing pipe. of following size of conductors & nos.of pairs. With necessary connections.[A] Conductor Size 0.5 mm (a) Unarmoured (2) Two Pairs	As per Electrical Specification Book attached.
144	Providing & erecting main Distribution (MDF) indoor type, back mounted frame as per DoT standard approved with krone strips (a) Suitable for 10 pair	As per Electrical Specification Book attached.
145	Providing & erecting Switch board for Computer or electric apparatus consisting of following modular type accessories mounted with PVC / Metallic concealed/open box with single mounting base frame covered with textured/metallic /white front plate,modules erected with necessary connections as directed 1 no. 6A/16A universal plug-switch combined. 3 nos. 6A Switch 2 nos. 6A Fuse Plug For Modular Type Accessories Cat. III	As per Electrical Specification Book attached.
146	Decorative call bell Ting-tong box type 250 volts complete erected	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
147	<p>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 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 %</p> <p>(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat. III</p>	As per Electrical Specification Book attached.
148	<p>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</p>	As per Electrical Specification Book attached.
149	<p>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 pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminium casted body with company mark/name 160V to 270V,Power Factor more than 0.95, THD < 15 %, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt , LED driver efficiency > 85 %</p> <p>(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Square/ Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete.IP20 (ii) 11-15 watts, Surge-2 KV Cat. III</p>	As per Electrical Specification Book attached.
150	<p>Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Street Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (i) above 36 to 48 watts Cat-III</p>	As per Electrical Specification Book attached.
b	<p>(C) Post Top Lantern LED fitting comprises of finish cast aluminum spigot and spun aluminum canopy fixed with opal polycarbonate, pipe arrangement for vertical mounting driver and accessories wired upto terminal block.IP 65 (i)20-30W Cat-II</p>	As per Electrical Specification Book attached.
151	<p>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</p>	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
152	Supplying and erecting triple pole & neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	As per Electrical Specification Book attached.
153	Supplying KITKAT pattern porcelain cut-out fuse with base of following current capacity erected on existing block board.(v) 100 A. 500 V.	As per Electrical Specification Book attached.
154	providing and erecting Miniature circuit breaker single pole 0.5A to 2A system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat III	As per Electrical Specification Book attached.
155	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	As per Electrical Specification Book attached.
156	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (A) 6 to 32 Amp. Cat III	As per Electrical Specification Book attached.
157	Providing & erecting 415V MCB Four Pole Switch for Lighting Load (B curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (A) 6 to 32 Amp. Cat III	As per Electrical Specification Book attached.
158	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat III	As per Electrical Specification Book attached.
b	(c)63 Amp. Cat III	As per Electrical Specification Book attached.
159	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 (B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (i)4 way	As per Electrical Specification Book attached.
b	(ii)6 way	As per Electrical Specification Book attached.
160	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 (i) 25 Amps.DP Cat III	As per Electrical Specification Book attached.
b	(ii) 40Amps. DP Cat III	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
161	<p>Supplying & erecting earth pit of minimum bore dia.150mm size approved make 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 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm 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 resistance 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, Sulphur 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. (a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr Back filling compound - 1 Nos Bag of 15 Kg.</p>	As per Electrical Specification Book attached.
162	<p>Providing & erecting weather proof, dust & vermin proof, floor mounted front operated outdoor type double door cubical panel board necessary IP-54 and above protection as per approval from engineer incharge made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S.sheet for internal partitions with necessary accessories , supporting angles/ flats channel including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses/MCB for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket,heavy duty end terminal connection,danger notice board,necessary ventilation,earthing strip complete. The Panel shall be painted with epoxy powder coating. (The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size.(A) locally fabricated panel board (i) with 350 mm depth</p>	As per Electrical Specification Book attached.
163	<p>Supplying & erecting XLPE(IS:7098) (I)-88 ISI unarmoured Aluminium cable 1.1 KV.grade to be erected as directed of following size. (B)4 core 4 Sq. mm</p>	As per Electrical Specification Book attached.
164	<p>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)</p>	As per Electrical Specification Book attached.
165	<p>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.(A) 2 to 4 core 2.5 / 4 Sq. mm</p>	As per Electrical Specification Book attached.
166	<p>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</p>	As per Electrical Specification Book attached.
167	<p>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. (A) 1.5/ 2.5/4/6 Sq.mm</p>	As per Electrical Specification Book attached.
b	<p>(C) 16/25 Sq.mm.</p>	As per Electrical Specification
168	<p>Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.</p>	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
169	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	As per Electrical Specification Book attached.
170	Providing and erecting Approved make Ceiling fan with double ball bearing ISI mark with condenser A.C. 230V.50 c/s.1200 mm. sweep complete, canopy erected on existing hook or clamp with earthing. [Make shall be approved by Engineer in charge]	As per Electrical Specification Book attached.
171	Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with proper insulation without leakage and earthing.	As per Electrical Specification Book attached.
172	Supplying & erecting fan hook box of 10 mm M.S. round bar bounded to the RCC bars up to 50mm length each side and pierced through a 16 Gauge M.S. box / Heavy Duty PVC box complete erected concealed in Ceiling with necessary finishing.	As per Electrical Specification Book attached.
173	Providing 2.5mm.thick laminated acrylic sheet to cover the fan hook or Fan box.	As per Electrical Specification Book attached.
174	Supplying & erecting approved make low noise decorative exhaust fan having square frame ABS body with inbuilt lowers & square frame.250mm with 1350 RPM Cat.II	As per Electrical Specification Book attached.
175	Supplying & erecting approved make SMC press moulded composite FRP. loop in, loop-out approx. 2mm thick box complete with Bakelite connector strip 5way(3P+N+E),DIN rail for mounting mob & hinged doors as per requirement having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamps& earth bolt of following size of box.(A) 300mm x 200mm x 100mm [deep]	As per Electrical Specification Book attached.
b	(C)150mm x 125mm x 100mm [deep]	As per Electrical Specification
176	Supplying and erecting B class Galvanized iron pipe having smooth finished bore of the pipe on both ends erected nuts and bolts along the pole / wall shaping the pipe as per site requirement. Pipe dia as following.(B) 32 mm dia	As per Electrical Specification Book attached.
177	Supplying & erecting approved make Digital time switch having lithium cell 6 years operative and operate battery backup 1 channel day clock with 14 memory programme, suitable to operate on 240V + 5%, 16A with, floating contacts Minimum switching setup time 1 minimum & LCD display. Also comprised permanent ON/OFF switching. Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.	As per Electrical Specification Book attached.
178	Supplying & erecting power contactor ,AC3 duty for time switch complete erected as per direction Cat III (C) 4 pole 440V 16 Amp.	As per Electrical Specification Book attached.
179	Supplying and erecting approved make panel mounting type Digital Voltmeter having 3 digits LED display, 0 to 750 AC Volts range erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	As per Electrical Specification Book attached.
180	Supplying and erecting approved make panel mounting type Digital Ammeter having 3 digits LED display, external CT operated, calibrated for 0 to 1000 Amps suitable to operate on 500 Volt AC , erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	As per Electrical Specification Book attached.
181	Supplying and erecting Ammeter / Voltmeter selector switch for 3 phase AC Supply 500 V on existing panel board with necessary connections.	As per Electrical Specification Book attached.
182	Providing & erecting L.T. Current Transformer with bar primary 50/5 to 1000/5 ratio 15 VA burden erected in existing CRCA box duly secured with insulating materials connected to the meter	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
183	Supplying and erecting approved make suitable panel indicator LED type lamp, lens cover, complete erected with necessary connections.	As per Electrical Specification Book attached.

Deputy Executive Engineer
Panchayat (R & B) Sub Division
Balasinor

Executive Engineer
Panchayat (R & B) Division
Lunavada

**Name of Work :- Construction of New Pashu Davakhana at Janod
Ta. Balasinor Dist. Mahisagar**

STEEL CONSUMPTION STATEMENT

Item No.	Item of Work	Total Qty	Unit
1	2	3	4
27	Providing I.S.I. Mark T.M.T. bar Fe-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto all floor level.	34247.40	Kg.
28	Providing I.S.I. Mark T.M.T. bar Fe-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level. Extra for additional lift of reinforcing steel for all R.C.C. work above floor two level.	2154.87	Kg.
	Total	36402.27	/ Kg.
	i.e.	36.40	/ M.T.
	Say	36.50	/ M.T.

Deputy Executive Engineer
Panchayat (R & B) Sub Division
Balasinor

Executive Engineer
Panchayat (R & B) Division
Lunavada

**Name of Work :- Construction of New Pashu Davakhana at Janod Ta.
Balasinor Dist. Mahisagar**

CEMENT CONSUMPTION STATEMENT

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
121.06	Cum	3	Providing and laying cement concrete work 1:2:4 (1- Cement : 2- Coarse sand : 4 graded stone aggregates 20 mm nominal size) and curing complete excluding cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, base or columns and mass concrete.	5.80	Cum	702.15
85.27	Cum	4	Providing and laying controlled cement concrete M-250 and finishing smooth with curing etc complete, including the cost of formwork but excluding the cost of reinforcement for R.C.C. work in Foundations, footings base of columns & mass concrete.	7.60	Cum	648.08
45.05	Cum	5	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 Columns, pillars, posts & struts upto floor two level for G.F.	7.60	Cum	342.38
43.22	Cum	6	Providing and laying controlled cement concrete M-250 and finishing smooth with curing etc. complete including the cost of formwork but excluding the cost of reinforcement for R.C.C. work in Plinth beams.	7.60	Cum	328.47
30.43	Sq.m.	11	Providing and laying damp proof course 25mm thick cement concrete 1:2:4 (1-cement : 2 coarse sand : 4 stone aggregate 10 mm nominal size) and curing complete	0.15	Sq.m.	4.56
39.62	Cum	12	Providing and laying brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg./Sq.cm. in super structure above plinth level and up to floor two level in cement mortar 1:6 (1 cement : 6 fine sand) including the cost of all materials and labour charges etc. complete.	1.20	Cum	47.54
74.71	Cum	13	Providing and laying brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg/sq.cm. in super structure above floor two level in cement mortar 1:6 (1 cement : 6 fine sand) for Ground Floor including the cost of all materials and labour charges etc. complete.	1.20	Cum	89.65
27.75	Cum	14	Providing and laying brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg/sq.cm. in super structure above floor two level in cement mortar 1:6 (1 cement : 6 fine sand) for First Floor including the cost of all materials and labour charges etc. complete.	1.20	Cum	33.30
32.24	Sq.m.	15	Providing and laying half brick work using common burnt clay building conventional type bricks having crushing strength not less than 35 Kg/Sq.cm in cement mortar 1:4 (1 cement : 4 coarse sand) in super structure above plinth level upto floor two level for Ground floor including the cost of all materials and labour charges etc. complete.	0.21	Sq.m.	6.77
13.37	Cum	16	Providing and laying cement concrete 1:3:6 (1- Cement : 3- Coarse sand : 6 crushed stone aggregates 20 mm nominal size) and curing complete including cost of formwork in (A) Wall Caps / Coping	4.40	Cum	58.83

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
1.96	Cum	17	Providing and laying controlled cement concrete M-200 and curing etc. complete including the cost of form work but excluding the cost of reinforcement in (C) Slabs landings shelves balconies, lintel -chhaja, beams, girders and cantilever up floor to level. (Lintel)	7.20	Cum	14.11
0.14	Cum	18	Providing and laying controlled cement concrete M-200 and curing etc. complete including the cost of form work but excluding the cost of reinforcement in (C) Slabs landings shelves balconies, lintel-chhaja, beams, girders and cantilever up floor to level. (Lintel)	7.20	Cum	1.01
2.11	Cum	19	Providing and laying controlled cement concrete M-200 and curing etc. complete including the cost of form work but excluding the cost of reinforcement in (C) Slabs landings shelves balconies, lintel-chhaja, beams, girders and cantilever up floor to level (Chajja).	7.20	Cum	15.19
2.82	Cum	20	Providing and laying controlled cement concrete work of M-200 and curing complete including cost of formwork and excluding reinforcement for reinforced concrete work in (E) Staircases excluding landing upto floor two level for staircase in below give fair finish surface.	7.20	Cum	20.30
6.10	Cum	21	Providing and laying controlled cement concrete M-200 and curing complete including the cost of formwork but excluding the cost of reinforcement for reinforced concrete work in (D) Columns, pillars posts and struts, upto floor two level for Ground floor.	7.60	Cum	46.36
27.22	Cum	22	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Beam upto floor two level for G.F.	7.20	Cum	195.98
1.97	Cum	23	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Beam upto floor two level for F.F.	7.20	Cum	14.18
40.29	Cum	24	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs, landing, cantilevers upto floor two level for G.F. slab for Grade slab.	7.20	Cum	290.09
43.31	Cum	25	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs, landing, cantilevers upto floor two level for G.F. slab	7.20	Cum	311.83
2.87	Cum	26	Providing and laying controlled cement concrete M-200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs, landing, cantilevers upto floor two level for F.F. slab	7.20	Cum	20.66
193.74	Sq.m.	37	Providing and laying 24" x 24" vitrified 8 mm thick tiles flooring over 20mm (average) base of cement mortar 1:6 (1 cement : 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finished with flush pointing & cleaning the surface etc. complete for anti skid.	0.21	Sq.m.	40.69
6.65	Sq.m.	38	Providing and laying Ceramic tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement. (antiskid)	0.25	Sq.m.	1.66

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
99.31	Sq.m.	39	Providing and laying Marbo Granite tiles 8 to 10 mm thick, 24" x 24" in skirting, risers of steps and dedo on 10mm thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with white cement slurry.	0.19	Sq.m.	18.87
23.12	Sq.m.	40	Providing and laying polished Kota stone slab flooring over 20mm (average) thick base of cement mortar 1:6 (1-cement : 6 coarse sand) or L.M. 1.1.5 (1-Lime putty :1.5 - coarse sand) laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. (A) 25mm thick	0.24	Sq.m.	5.55
49.63	Sq.m.	41	Providing and laying 18 mm thick machine cut, free edges, machine polished Black Granite tread and risers in single piece with 1 cm nosing and necessary grooves on treads etc. complete.	0.24	Sq.m.	11.91
287.21	Sq.m.	42	Providing and laying broken china mosaic flooring for terrace using 12 mm to 20 mm broken pieces of glazed tiles to be laid over cement mortar 1:3 to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall, clearing with water and oxalic acid etc. as directed.	0.50	Sq.m.	143.61
284.85	Sq.m.	43	Providing and laying BBCC of 75mm thick layer in CM (1:3) including spraying two coat of water proofing chemical with selected brand by enginner in charge i.e. perma or other with leveling complete for ready base of china mosaic treatment.	0.05	Sq.m.	14.24
127.82	Rmt.	44	Providing and cement vata (10cm x 10cm size) quarter round in cement mortar 1:1 including neat cement finishing watering etc. complete.	0.05	Rmt.	6.39
679.79	Sq.m.	45	Providing 20 mm thick double coat mala cement plasteron interior brick / concrete work for plastering comprising of base coat of 12 mm thick cement plaster in cement mortar (1 Cement : 4 coarse sand) in roughfinishing and 8 mm thick top coat of cement mortar 1:2 (1 Cement : 2 Coarse sand) finished with trovel including scaffolding curing etc. complete.	0.34	Sq.m.	231.13
299.10	Sq.m.	46	Providing 15mm thick cement plaster in single coat on brick/concrete walls for interior plastering upto floor two level and finished even and smooth in cement mortar 1:4 (1-cement : 4 sand) for ceiling.	0.13	Sq.m.	38.88
894.57	Sq.m.	47	Providing 20mm thick sand faced cement plaster on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3-sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete.	0.34	Sq.m.	304.15
3.00	No.	71	Providing and laying wash down water closet (European type Wall hung W.C. pan) Florentine series FLS-WHT 0111B including providing and fixing metropole flush cock seat cover, jet wash etc. complete unit of jaquar branch (or equivalent) including installing and fitting as per manufacturers standards by skilled trained plumber including testing etc. complete quality and brand as approved by Engineer in charge.	0.20	No.	0.60
9.00	No.	73	Providing and fixing PVC SWR Nahni Trap IS 14735 for drain with jail of the following nominal diameter of self cleansing design with C.I. screwed down of hinged grating including the cost of cutting and making good the walls. (i) 100mm dia.	0.10	No.	0.90

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
5.00	No.	74	Providing and fixing S.W.gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300 mm size (inside) with standard weight (i) square mouth traps (A) 100 mm x 100 mm size P type.	0.46	No.	2.30
20.00	Rmt.	75	Providing and laying (two level or slopes) and jointing with stiff mixture of cement mortar in proportion 1:1 salt glazed stone ware pipes following nominal internal diameter including testing of pipes and joints etc. complete. 150 mm dia.	0.065	Rmt.	1.30
6.00	No.	76	Constructing brick masonry chamber for under ground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg/cm ² in C.M. 1:5 C.I. cover with frame (light duty) 455 mm x 610 mm. internal dimensions, total weight of cover with frame to be not less than 38 Kgs. weight of cover 23 Kg. and wt. of frame 15 Kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm. size) foundation concrete 1:5:10 inside plaster 15 mm. thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls & a bed concrete etc. complete. (i) inside dimension 455mm x 610 mm and 450mm deep for single pipe line.	1.422	No.	8.53
1.00	No.	77	Constructing Manhole with R.C.C. top slab in 1:2:4 mix (1-cement :2-coarse sand : 4-graded stone aggregate 20mm nominal size) foundation concrete 1:3:6 mix (1-cement : 3- coarse sand :6-Brick bats 40 + 50mm size) inside plastering 15mm thick with Cement Mortar 1:5 (1-Cement : 5-coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1-Cement : 2-Coarse sand :4-stone aggregate 20mm nominal size) finished smooth complete including curing and festing (i) Inside size 900mm x 1200mm and 1.5M. deep including C.I. cover with frame size 560mm diameter total weight of cover and frame to be not less than 128 kgs. (Wt. of cover 64 Kg. and Wt. of frame 64 Kg.) (A) With 230mm thick walls of brick masonry using brick having crushing strength not less than 35Kg. / Sq.cm. in Cement Mortar 1:5 (1- Cement : 5 Coarse sand) (1) A type depth 0.90 Metre for 150mm diameter sewer.	8.127	No.	8.13
8.21	Sq.m.	82	Providing and laying sandwich type kitchen platform of size 2.10 x 0.76 x 0.76 m and respected length with dhar polish or moulding having base 4" and support & base with marble or kota as per site requirement also loft and base finish with glaze tile and top with selected shed of marble or granite with gas pipe provision and sink including all fittings, material and labour as per directed by Engineer incharge.	0.25	Sq.m.	2.05
1.00	No.	103	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg./cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(ii) Inside dimensions 500mm x 700 mm and 450mm deep for pipe line with one or two inlets.	1.683	No.	1.68

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
18.00	Rmt.	107	Providing and laying cement concrete 1:5:10 (1-Cement : 5 fine sand :10 graded stone aggregate 40mm nominal size) bedding for stoneware pipes of following internal diameters with necessary formwork and curing complete.(B) 150mm dia. (166mm avg. bed thickness)	0.21	Rmt.	3.78
5.00	No.	108	Extra over item 24.1 for providing salt glazed stoneware fittings. (i) Bends of required degree (any radius) of following nominal diameters. (B) 150mm dia.	0.21	No.	1.05
40.77	Sq.m.	109	Providing and laying marble chips skirting (Terrazo) or dedo rubbed, and polished to Granolithic finish top layer 6mm thick with white, black or white and black marble chips of size from smallest to 4mm nominal size laid in cement marble powder mix 3:1 (3-cement : 1 marble powder by weight) in proportion of 4:7 (4-cement marble powder mix : 7-marble chips by volume) 20mm thick with under layer 14mm thick cement plaster 1:3 (1-cement : 3 coarse sand) (A) Dark shade pigment with ordinary cement (In top layer only)	0.33	Sq.m.	13.45
3.10	Cum	111	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.	5.80	Cum	17.98
69.04	Sq.m.	112	Double half brick thick honey comb brick work with common burnt clay building bricks having crushing strength not less than 35 Kg/Sq.cm. (i) In cement mortar 1:4 (1 cement : 4 coarse sand)	0.12	Sq.m.	8.28
49.00	Rmt.	114	Providing, laying (to level or slopes) and jointing reinforced concrete light duty non-pressure pipes I.S. class NP-2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete. (B) 150mm	0.12	Rmt.	5.88
2.00	No.	115	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg/Cm ² in C.M. 1:5 C.I. cover with frame (light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete. (iii) Inside dimensions 600mm x 850 mm and 450mm deep for pipe lines with three or more inlets.	2.122	No.	4.24
30.00	Rmt.	116	Providing, laying (to level or slopes) and jointing reinforced concrete light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete. (C) 250mm	0.03	Rmt.	0.90
10.00	No.	118	Providing and fixing PVC SWR Nahni trap IS-14735 for drain - 75 mm diameter with jali of the following nominal diameter of self cleansing design with C.I. screwed down or hinged grating including the cost of cutting and making good the walls.	0.10	No.	1.00
38.37	Cum	128	Providing and laying burnt brick masonry for super structure with ordinary portland cement mortar 1:5 proportion including providing scaffolding racking out joints curing etc. complete for all leads and lifts. (Conventional Bricks) upto floor two level	1.49	Cum	57.17

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags	
1	2	3	4	5	6	7	
560.02	Sq.m.	129	Providing 20 mm thick sand faced cement plaster with Gutka on walls upto height 10 meters above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1 cement : 3 sand) and 8mm thick finishing coat of C.M. 1:1 (1cement :1 sand) etc. complete including painting with two coats of water proof acrylic emulsion paint to give an even shade.	0.34	Sq.m.	190.41	
				Total		4338.20	Bags
				i.e.		216.91	MT
				Say		217.00	MT

Deputy Executive Engineer
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Balasinor

Executive Engineer
Panchayat (R & B) Division
Lunavada

**Name of Work :- Construction of New Pashu Davakhana at Janod Ta. Balasinor
Dist. Mahisagar**

TEST SCHEDULE

Sr. No.	Name of Materials	Type of Test To be Performed	Qty	Frequency of Test As per Govt. Circular (For all Type of tests).	No of Test Reqd.
1	2	3	4	5	6
				Nos. of Test	
1	M.C. Kapchi 10 to 20 mm	1 Agg. Impact Value 2 Gradation 3 Flakiness Index 4 Abrasion Test 5 Crushing Test	282.22 Cum	100 Cum 1 101-500 Cum 3 501-1500 Cum 5 1501-5000 Cum 7 5001 to 8000 Cum 7	3
2	Murum	1 PlastiConstn Limit 2 Liquid Limit	158.39 Cum	1501-5000 Cum 7	3
3	Bricks	1 Dimention 2 Efflorescence 3 Water absorption 4 Compressive Strength	93813.00 Nos.	20 Bricks upto 10000 Nos 32 Bricks upto 35000 Nos 50 Bricks upto 50000 Nos	100
4	Steel TMT Fe-500D	1 Bend Rebend IS 1599-1960 2 Tensille, yield elongation IS 1608-1972 3 Dimension Test 4 Ulitimate Test	36.50 M.T.	1 test per 40 Tonne for each category	1 test per category
5	Cement	1 Consistency 2 Setting time 3 Compressive Strength 4 Fineness 5 Chemical Analysis I.S. 4032-968	217.00 M.T.	50 MT 1 51 to 100 MT 2 101 to 200 MT 3 201 to 300 MT 4 301 to 500 MT 5 501 to 800 MT 6 801 to 1300 MT 7	4
6	Concrete Cube (For All Grade of Concrete Ordinary / Controlled) C.C. 1:2:4 & C.C. 1:3:6 CC- M-150 CC- M-200 CC- M-250 CC- M-300	Compressive Strength	121.06 13.37 3.10 128.79 173.54 439.86 Cum	1 to 5 Cum 1 6 to 15 Cum 2 16 to 20 Cum 3 21 to 50 Cum 4 51 above Cum 4+1 Each 50 Cu.M part thereof	54

Sr. No.	Name of Materials	Type of Test To be Performed	Qty	Frequency of Test As per Govt. Circular (For all Type of tests).	No of Test Reqd.
1	2	3	4	5	6
				Nos. of Test	
7	Sand	1 Silt Content 2 F.M	625.86 Cum	150 to 5000 Cum 7 5000 to 8000 Cum 9	7
8	Water	1 Chemical Analysis	-	1 Test / 1 Source	1
9	Crushed Metal 25 to 40mm nominal size	1 Agg. Impact Value 2 Gradation 3 Flakiness Index 4 Abrasion Test 5 Crushing Test	0.00 Cum	100 Cum 1 101-500 Cum 3 501-1500 Cum 5 1501-5000 Cum 7	1
10	Teak wood	1 Anatomy test 2 Density test 3 Moisture content test	24.90 Sq.m.		
11	Tiles	1 Dimension test 2 Transverse strength 3 Water Absorption 4 Abrasion test	319.93 Sq.m.		

DTP for Approval

Deputy Executive Engineer
Panchayat (R & B) Sub Division
Balasinor

Executive Engineer
Panchayat (R & B) Division
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