

**Name of Work :- Construction of New Prathmik Pashu Sarvar Kendra At Village  
Dev 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
				<b>Nos. of Test</b>	
1	M.C. Kapchi 10 to 20 mm	1 Agg. Impact Value 2 Gradation 3 Flakiness Index 4 Abrasion Test 5 Crushing Test	194.11 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	73.22 Cum	1501-5000 Cum 7	3
3	Bricks	1 Dimention 2 Efflorescence 3 Water absorption 4 Compressive Strength	59330.00 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	23.20 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	139.00 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	87.45 6.27 6.20 115.38 96.46  <b>311.76 Cum</b>	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
				<b>Nos. of Test</b>	
7	Sand	1 Silt Content 2 F.M	398.93 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	32.00 Sq.m.		
11	Tiles	1 Dimension test 2 Transverse strength 3 Water Absorption 4 Abrasion test	265.97 Sq.m.		

DTP for Approval

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

Executive Engineer  
Panchayat (R & B) Division  
Lunavada

**Name of Work :- Construction of New Prathmik Pashu Sarvar Kendra At  
Village Dev Ta. Balasinor Dist. Mahisagar**

**SPECIFICATION INDEX**

<b>It. No.</b>	<b>Description of Item</b>	<b>Applicable specification reference</b>
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 pressure compensation chip every 30 cm interval in the tube, having working pressure of 2 Kg/cm <sup>2</sup> and release rate of 1.9 ltr/hour fixed by P-clips and nails. The LLDP pipe shall be installed at the entire periphery of the building and at internal network of building at a depth of 20 to 200 mm under floor at every 2 to 3 mtr. c/c distance (adjusted as per building layout) & Ends of loop pass through a PVC elbow of minimum 32 mm ID at junction box of wall and floor level, entering into a steel reinforced grooved flexible pipe of minimum 22 mm ID leading into junction box and the loops shall terminate in junction boxes & test every junction during injecting chemicals for termite control treatment. The anti termite chemical Imidacloprid 30.5% SC mix as per IS-6313 (part III) shall be injected by the pressure pump diluted with water @ 10.5 ml/5 ltr of water at the rate of 2 Kg/sq.cm @ 5 Ltr/SMT. The contractor shall submit approved line plan for piping system and junction boxes duly approved by Engineer-in-Charge with bond of 5 year warranty. (i) Anti Termite chemical injected area (Chemical injecting incl. labour cost)	As per Separate Sheet attached.
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.
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.

It. No.	Description of Item	Applicable specification reference
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	Half brick masonry in Common Burnt Clay building bricks having crushing strength not less than 35 kg/sq.cm in super structure above plinth level upto floor two level in cement mortar 1:4 GF ( 1 cement : 4 fine sand) (B) Conventional.	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 c.c. M.200 & curing complete including the cost of form work but Excluding the cost of reinforcement for reinforced concrete work in Collumns, pillars, posts & struts upto floor two level for G.F.	As per Separate Sheet attached.
22	Providing and laying controlled c.c. M.200 & curing complete including the cost of form work but Excluding the cost of reinforcement for reinforced concrete work in Collumns, pillars, posts & struts 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 G.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 Beam upto floor two level for F.F.	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 for Grade slab.	As per Separate Sheet attached.
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 G.F. slab	As per Separate Sheet attached.
27	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.
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 all floor level.	As per Separate Sheet attached.

It. No.	Description of Item	Applicable specification reference
29	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.
30	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.
31	Providing & fixing 40 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 as per the instruction of Engineer in charge.with necessary SS hinges and fixtures etc . complete.	As per Separate Sheet attached.
32	Providing & fixing 35 mm thick Single shutter flush door solid core finished with both side 1 mm thick laminationboth side like 'NOVAPAN 'or equivalent, of natural wood grain shade as approved by this office having telephone blackgranite 18 mm thick frame with double stone including fixed ventilation above lintle level as per drg and as per theinstruction of Engineer in charge.with necessary SS hinges and fixtures etc . complete.	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 Blur 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.
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 around, square or round bars with round headed bolts and nuts or by screws (A) Ornamentle Grill.	As per Separate Sheet attached.
37	Providing and laying Vitrified tiles 8 to 10 mm thick , 36" x 36" 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. Light Shade	As per Separate Sheet attached.
38	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (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 finised with flush pointing & cleaning the surface etc. complete for antiskit	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.

It. No.	Description of Item	Applicable specification reference
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 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 even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand) including Galvanised Iron Chicken Mesh, 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.
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.

It. No.	Description of Item	Applicable specification reference
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.
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 WallHung Square WC pan ) Florentine series FLS-WHT 0111B including providing and fixing metropole Flush cock seat cover, jet wash etc complete unit of jaquar Branch ( or equvalant ) 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.

It. No.	Description of Item	Applicable specification reference
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.
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 <sup>2</sup> 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	Painting lines, deashes, arrows, letters etc on roads, Air fields, on walls and like in two coats with road marking paint, brushing including cleaning the surface of all dirt, dust and other foreign matter. (i) Upto 10cm in width	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.



It. No.	Description of Item	Applicable specification reference
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 pre-cast Rubber Dye I steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed I 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.
87	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.
88	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.
89	Providing & supplying 175mm nominal dia. UPVC "CS" type pipe as per IS:12818 and as per detailed technical specification.	As per Separate Sheet attached.
90	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.
91	SITC of D.O.L starter up to 7.5 H.P.	As per Separate Sheet attached.
92	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.
93	Heavy duty, 50 mm dia. G.I. Column pipe both end threaded having length approximate 3 mtr. confirming to IS 1239 (Part-1) with coupling at one end.	As per Separate Sheet attached.
94	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.
95	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.
96	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.
97	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.
98	Supply of TOP & BOTTOM accessories of 50 mm dia.	As per Separate Sheet attached.
99	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.

It. No.	Description of Item	Applicable specification reference
100	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.
101	Pumping test of the tubewell by sub mersible pump of adequate capacity for 165 mm DTH bore.	As per Separate Sheet attached.
102	Providing and fitting readymade prefabricated portable chemicalized ferro concrete mini panel having outer size 110 x 50 x 190 cm with necessary fitting for electic panel mounting complete as per detailed specification and drawing.	As per Separate Sheet attached.
103	Three Phase GEB power charges.	As per Separate Sheet attached.
104	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.
105	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.
106	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.
107	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.
108	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.
109	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg/Cm2 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.
110	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.
111	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.
112	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.
113	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.
114	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.
115	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.

It. No.	Description of Item	Applicable specification reference
116	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.
117	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.
118	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.
119	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.

It. No.	Description of Item	Applicable specification reference
120	Stainless Steel Office Almira : Supply and installing Portable Modern double Door steel almira 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.
121	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 Electrical Specification Book attached.
122	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.
123	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.
124	Point wiring for Tisino / 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.
125	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.
126	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.
127	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.

It. No.	Description of Item	Applicable specification reference
d	(10) 6/16Amp. Universal socket Cat. III	As per Electrical Specification Book attached.
128	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.
129	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.
130	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.
131	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.
132	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction [C] CAT - 6	As per Electrical Specification Book attached.
133	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.
134	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.
135	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 3 nos. 6A 5 pin Plug For Modular Type Accessories Cat. III	As per Electrical Specification Book attached.
136	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
137	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 % ( 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	As per Electrical Specification Book attached.
138	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	As per Electrical Specification Book attached.
139	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 % ( 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	As per Electrical Specification Book attached.
140	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	As per Electrical Specification Book attached.
b	(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	As per Electrical Specification Book attached.
141	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.
142	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.

It. No.	Description of Item	Applicable specification reference
143	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.
144	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(B) 40 Amp. Cat III	As per Electrical Specification Book attached.
145	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.
146	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.
147	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	As per Electrical Specification Book attached.
148	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.
149	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 resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr Back filling compound - 1 Nos Bag of 15 Kg.	As per Electrical Specification Book attached.

It. No.	Description of Item	Applicable specification reference
150	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	As per Electrical Specification Book attached.
151	Supplying & erecting XLPE (IS:7098) (I)-88 ISI unarmoured Aluminium cable 1.1 KV. grade to be erected as directed of following size. (B) 2 core 4 Sq. mm	As per Electrical Specification Book attached.
152	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) 4 core 16 Sq. mm	As per Electrical Specification Book attached.
153	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	As per Electrical Specification Book attached.
154	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	As per Electrical Specification Book attached.
b	(C) 16/25 Sq. mm.	As per Electrical Specification Book attached.
155	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.	As per Electrical Specification Book attached.
156	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.
157	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.
158	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.
159	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.
160	Providing 2.5mm. thick laminated acrylic sheet to cover the fan hook or Fan box.	As per Electrical Specification Book attached.
161	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.



<b>It. No.</b>	<b>Description of Item</b>	<b>Applicable specification reference</b>
162	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 Book attached.
163	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.
164	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.
165	Supplying & erecting power contactor ,AC3 duty for time switch complete erected as per direction Cat III(A) 2 Pole 250V 12 Amp.	As per Electrical Specification Book attached.
166	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 Prathmik Pashu Sarvar  
Kendra At Village Dev Ta. Balasinor Dist. Mahisagar**

**STEEL CONSUMPTION STATEMENT**

<b>Item No.</b>	<b>Item of Work</b>	<b>Total Qty</b>	<b>Unit</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
27	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	2.88	Cum
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 all floor level.	23108.30	Kg.
	<b>Total</b>	<b>23111.18</b>	<b>/ Kg.</b>
	<b>i.e.</b>	<b>23.11</b>	<b>/ M.T.</b>
	<b>Say</b>	<b>23.20</b>	<b>/ M.T.</b>

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

Executive Engineer  
Panchayat (R & B) Division  
Lunavada

**Name of Work :- Construction of New Prathmik Pashu Sarvar Kendra At  
Village Dev 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
87.45	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	507.21
63.76	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	484.58
9.34	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	70.98
23.36	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	177.54
31.70	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.	4.76
29.76	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	35.71
76.21	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	91.45
7.28	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	8.74
43.09	Sq.m.	15	Half brick masonry in Common Burnt Clay building bricks having crushing strength not less than 35 kg/sq.cm in super structure above plinth level upto floor two level in cement mortar 1:4 GF ( 1 cement : 4 fine sand) (B) Conventional.	0.21	Sq.m.	9.05
6.27	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	27.59

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
2.65	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	19.08
0.05	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	0.36
1.10	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	7.92
2.10	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	15.12
14.40	Cum	21	Providing and laying controlled c.c. M.200 & curing complete including the cost of form work but Excluding the cost of reinforcement for reinforced concrete work in Collumns, pillars, posts & struts upto floor two level for G.F.	7.60	Cum	109.44
4.92	Cum	22	Providing and laying controlled c.c. M.200 & curing complete including the cost of form work but Excluding the cost of reinforcement for reinforced concrete work in Collumns, pillars, posts & struts upto floor two level for G.F.	7.20	Cum	35.42
27.50	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 G.F.	7.20	Cum	198.00
1.98	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 Beam upto floor two level for F.F.	7.20	Cum	14.26
29.89	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 for Grade slab.	7.20	Cum	215.21
30.79	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 G.F. slab	7.20	Cum	221.69
165.42	Sq.m.	37	Providing and laying Vitrified tiles 8 to 10 mm thick , 36" x 36" 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. Light Shade	0.21	Sq.m.	34.74
7.27	Sq.m.	38	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (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 finised with flush pointing & cleaning the surface etc. complete for antiskit	0.25	Sq.m.	1.82

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
92.77	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.	17.63
22.88	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.	5.49
34.78	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.	8.35
198.97	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.	99.49
206.09	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.	10.30
104.35	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.	5.22
582.11	Sq.m.	45	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 even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand) including Galvanised Iron Chicken Mesh, Complete.	0.13	Sq.m.	75.67
199.43	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.	25.93
604.18	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.	205.42
3.00	No.	71	Providing and laying wash down water closet ( european type WallHung Square WC pan ) Florentine series FLS-WHT 0111B including providing and fixing metropole Flush cock seat cover, jet wash etc complete unit of jaquar Branch ( or equvalant ) 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
8.00	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.	0.80
4.00	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.	1.84

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags
1	2	3	4	5	6	7
15.00	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.	0.98
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 <sup>2</sup> 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
1.81	Sq.m.	82	Providing and laying sandwich type kitchen platform of size 2.10 x0.76 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.	0.45
49.00	Rmt.	108	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.	109	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg/Cm <sup>2</sup> 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.	2.12	No.	4.24

Qty	Unit	Item No.	Item of Work	Rate of cement	Per	Qty. of Cement in bags	
1	2	3	4	5	6	7	
30.00	Rmt.	110	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.	112	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	
				<b>Total</b>		<b>2775.59</b>	<b>Bags</b>
				<b>i.e.</b>		<b>138.78</b>	<b>MT</b>
				<b>Say</b>		<b>139.00</b>	<b>MT</b>

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

Executive Engineer  
Panchayat (R & B) Division  
Lunavada