

## TECHNICAL SPECIFICATIONS

### CONSTRUCTION OF 1 X WAITING ROOM WITH VERANDAH AND 2X TOILETS (ATTACHED) AT ARMY PUBLIC SCHOOL, JALANDHAR CANTT

#### Dimension of Constr area:

External Size : 31'6" (l) x 17'6" (w) x 9'6" (h)

Internal Size : 30' (l) x 16' (w) x 9'6"(h)

S.No	Description of items	No of qty	Units
1.	Excavation over area n.exc. 0.80m in depth for foundation and getting out in soft/loose soil complete all as specified and directed. (Foundation work)	12.76	Cum
2.	M&L for PCC ( 1:4:8) type D-2 using 40mm graded stone aggregate as in foundation filling, mass concrete etc complete all as specified and directed. (Foundation work)	2.46	Cum
3.	M&L for fly ash brick work, in straight or curved on plan exc 6m mean radius, built in CM (1:6) complete all as specified and directed. (Foundation work)	25.30	Cum
4.	M&L for rendering 15mm thick cement mortar (1:4) on fair faces of brick or concrete surfaces finished even and smooth without using extra cement complete all as specified and directed.	150	Sqm
5.	M&L preparation of newly plastered surface of walls including cornices an ornamental moulding round the wall of room just below the ceiling), pilasters (a rectangular column, especially one projecting from a wall) etc. and applying one coat of wall putty 1mm thick including two coats of oil bound distemper (internal ) and two coats of exterior emulsion (external) complete all as specified and directed.	200	Sqm
6.	Material and labour mild steel TMT bars 10mm or 12 mm dia, cut to length, bent to shape required, including cranking, bending spirally for hooping for columns and beams, hooking ends and binding with and including mild steel wire (annealed)not less than 0.90mm dia or securing with clips complete all as specified and directed.	950	kg
7.	M&L for RCC (Nominal Mix) type A1(Birla A1 cement specially designed/made for beam etc. Cement, Aggregates (crushed stone) steel, water) 1:11/2:3 (12.5/20mm graded aggregate) as in columns, beams and Lintel including waterproof plywood shuttering and scaffolds etc complete all as specified.	8.00	Cum
8.	M&L anodised aluminium window/ventilator shutter side hung having 75 mm x 44 mm x 1.85mm thick stile bottom rail an top rail including necessary fitting joinery cleat (wood or iron strip to provide strength) glaring packing snap beading 10mm x 10mm, 2 Nos of anodised aluminium handle 150mm size, 2 No chromium plated bott hinges 75mm size and 2 No 100mm long aluminium tower bolt etc including frame of section 100mm x 44mmx 1mm and including 3.5 mm thick float glass and fixing complete all as specified & directed.	1.08	Sqm

9.	M&L aluminium anodised door shutter having 150mm x 44mm x 1.85mm thick bottom rail, 150mm x 44mm x 1mm thick middle rail 100mm x 44mm x 1.85mm thick stile and top rail including necessary fittings joinery cleat, glazing packing snap beading 10mm x 10mm, anodised aluminium handle 200mm long (02 No), 3 No 100mm size chromium plated butt hinges, 2 No 200mm size aluminium tower bolt and aluminium body hydraulically door closer, designation No 3, universal type, weight between 61 to 80kg etc including frame of section 100mm x 44mm x 1mm and door shutter, bottom portion covered with 9mm thick pre-laminated particle board, One mortice lock (Make : Harrison) with shutter and fixing complete all as specified and directed. (Main door (double door) 5' x 8'6" – 01(D), Doors 2'6" x 6'6" – 02(D1 & D2), window 5' x 4' – 02(W), Ventilator 1'6" x 1'6" – 02(V) (all with ACP panel)	12.5	Sqm
10.	Supply and fixing factory made solid panel PVC door shutter 30mm thick (style) consisting of frame made out of MS tubes for top & bottom rails supplying & fixing in the frame at site, complete all as specified and directed (D3).	2.8	Sqm
11.	M&L for anti-skid vitrified ceramic tiles 2'x2' 10mm thick polished, set and jointed in neat cement slurry and pointed in white or coloured cement to match with tile laid over and including screed bed or bedding layer 15mm thick (layer below flooring) in CM (1:6) and 100mm thick pcc as sub base 1:4:8 complete all as specified and directed.	23	Sqm
12.	M&L for PCC 1:4:8 in floors, compacted and rolled over stone soling of 10.5mm thick; compacted. The extra earth below the soling will be laid in layers, watered and compacted.	20	Sqm
13.	M & L for anti termite treatment in floor. M&L non skid ceramic coloured tiles 7 to 8mm thick 1.25' x 1.25' for bathrooms set and jointed in neat cement slurry and pointed in white or coloured cement to match the shade of tiles laid over and including 15mm thick screed bed or bedding layer in cement mortar (1:6) and 100mm thick pcc as sub base 1:4:8 complete all as specified and directed.	15	Sqm
14.	M & L for plinth protection. M&L 15mm dia bore steel tubing medium grade galvanised with all fittings and fixed complete to walls and ceiling or laid in floors complete all as specified & directed.	42	rm
15.	M & L Dump proofing course of 75mm thick in PCC 1:2:4 with water proofing compound at FFL. M&L 20mm dia bore steel tubing medium grade galvanised with all fittings and fixed complete to walls and ceiling or laid in floors complete all as specified (European/Jindal).	22	rm
16.	S&F Cera Vitreous China white wash down water closet pan (WC pattern) with Trap and Fixing Bolts (including Flushing Cistern and Flush Pipe) including connection to drain (or outgoing pipe) and to Flushing Pipe, Anti-syphonage Pipe, etc. complete all as specified and as directed.	02	Nos

17.	Supply and fixing Cera vitreous china bowl urinal, full stall, white complete including providing and fixing plugs, bedding urinal against wall in cement mortar (1:2) securing urinal to plugs with and including 60mm long brass screws, pointing around urinal back in cement, including and fixing of flush pipe, grating with waste coupling and union for discharge pipe, waste pipe, spreader (Nahani Trap both male and female trap) etc. Complete all as specified and directed.	02	Nos
18.	Supply and fixing in Cera Vitreous china wash hand basin, white, flat back 550 x 400mm including taps, waste chain and plug and porcelain stopper but including bracket and cutting for and pinning in ends of brackets complete all as specified and directed.	02	No
19.	S&F rotational moulded synthetic (HDPE), water storage tank 1000 litre capacity triple layer (cylindrical vertical with closed top) hoisted & fixed in position including 20mm dia ball valve all as specified in SSR Part -1, including dismantling or existing water tank, complete all as specified and directed.	01	No
20.	Supply and fixing GEM bib tap cast copper alloy chromium plated suitable for 15mm bore iron pipe with long body fancy type complete all as specified and directed.	04	Nos
21.	Material & labour for concealed point wiring complete with single core 1.5Sqmm (nominal area) PVC insulated and unsheathed cable 1100 volts multistranded, copper conductor cable (FRLS) drawn through and including PVC concealed conduit not less than 20mm dia bore medium grade (ISI marked)and accessories like bends, tees, junction boxes etc, fix on wall or ceiling surfaces all as specified including 1.5 sqmm, FRLS type, copper multistranded cable as earth wire including sunken type pressed steel terminal boxes and plastic laminated white/coloured top sheet cover 3.0mm thick, for One light point/fan point/call bell point controlled by one way switch complete all as specified and directed.	15	Each point
22.	Supply and fix switch piano flush type, 5 Amps, 240V AC, single pole, one way complete all as specified and directed	15	Each
23.	Supply and fix socket outlet 5 Amp 5pin flush type complete all as specified.	4	Each
24.	Supply and fix sheet metal enclosures for DB's with 200 Amp rated bus bar double door class IP-43 epoxy coated inside and outside 8 way SPN 230 volts complete all as specified and directed.	1	Each
25.	Supply & fixing in repair energy saving tube light luminaire work diffuser LED with comprising with CRCA MS box and 4 feet 20 watt (min) retro fit tube rod having thermally conductive material lumen output 2100 lumens (min) 6500K, power factor more than 0.95, IP-20 Class-1 protection with inbuilt LED driver, surge protection upto 2KV, operative on 140 volts to 270 volts AC supply products must be made in India only, complete prewired, connection and testing complete all specified and directed.	5	Each

26.	Supply and fix MCB SP 6 to 32 Amp. 240 volts 10KA C-curve complete all as specified and directed.	6	Each
27	Supply and fixing ceiling fans (Havells/Crompton), including replacement of flexible wire, rubber reel, nuts, bolts complete all as specified and directed.	2	Each
28.	Supply and fixing exhaust fans (Havells/Crompton) including replacement of flexible wire, rubber reel, nuts, bolts complete all as specified and directed.	3	Each
29.	Supply and laying XLPE insulated screened PVC bedded galvanized steel strip or wire armoured electric power cable (Heavy duty ) 1100 volts grade of size 25 Sqmm 2 core complete all as specified.	20	RM
30.	Supply and fix fan regulator electronic type , five steps socket type single phase including connection complete all as specified and directed	2	Each
31.	Electric supply for 2 Ton AC in waiting room.	1	
32	M&L for sewerage line connection including excavation, pcc and 150mm salt glazed pipe etc. line connected to existing sewerage line (approx 35ft) complete all as specified.	1	Job