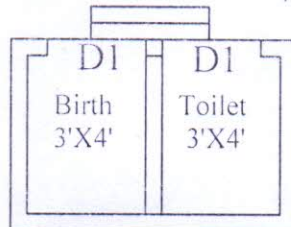
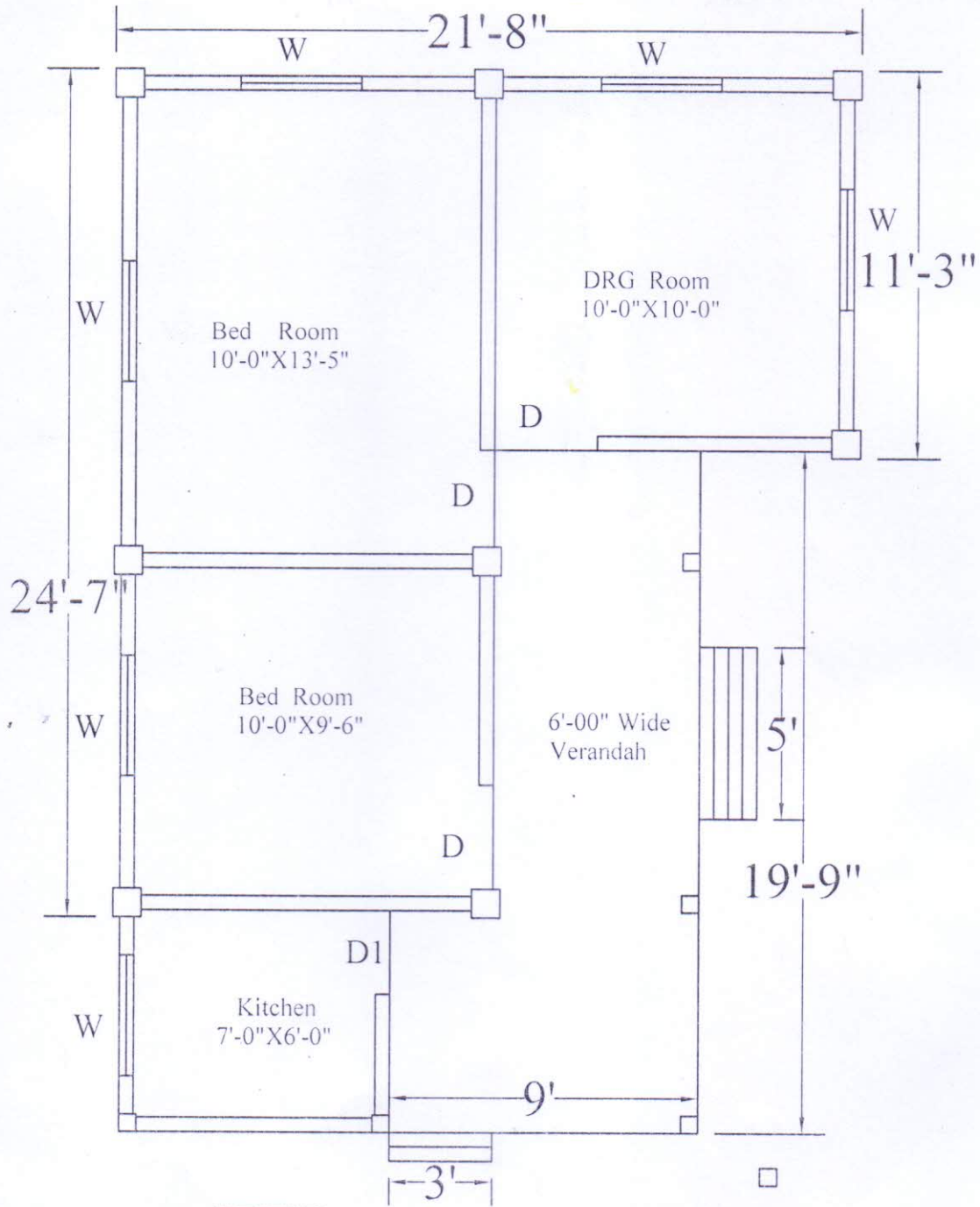


Design/Drawing of Special Houses For Tribal People



D=3'X7'
D1=2.5'X7'
W=3.5'X4'

Floor Area=574 sft.

Toilet Area=35 sft.

Total area=609 sft.

12.05.2020
মোঃ আবুল বাশার মোল্লা
সহকারী প্রকৌশলী
আশ্রয়ণ-২ প্রকল্প
প্রধানমন্ত্রীর কার্যালয়।

22/5/20
মোঃ আনোয়ার রহমান
উপ-প্রকল্প প্রকৌশলী
আশ্রয়ণ-২ প্রকল্প
প্রধানমন্ত্রী কার্যালয়

আবুল কালাম আজাদ
প্রকল্প প্রকৌশলী
আশ্রয়ণ-২ প্রকল্প
প্রধানমন্ত্রীর কার্যালয়

Detailed Estimate

Local Government Engineering Department

Scheme Code : 48458-20-10001

Road Code :

Financial Year : 2019-2020

Name of the Scheme : Construction of Residential building for Trival People.

Scheme Preparation Date : 10-Feb-2020

FY & Type of Rate : 2018-2019 (General)

District : RANGAMATI

Upazila : LANGADU

SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13
5.02.01		Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	main column	0.900	0.900	0.900	0.729	8.00	5.832		
				Ver.column	0.750	0.750	0.900	0.506	5.00	2.530		
				Step-1	1.520	0.900	0.150	0.205	1.00	0.205		
				Step-2	1.000	0.900	0.150	0.135	2.00	0.270		
				Toilet	6.710	0.370	0.150	0.372	1.00	0.372		
2.	5.02.02	Sand filling in foundation trenches and inside plinth with sand (minimum FM 0.50) in 150mm layers in/c leveling, watering and consolidating each layer up to finished level etc. all complete as per direction of the E-I-C. Dry density after compaction shall not be less than 95% of MDD (STD).	cum	Toilet	1.830	1.220	0.150	0.335	1.00	0.335		
				Main floor	6.860	3.050	0.150	3.138	1.00	3.138		
				Main floor-1	3.050	3.050	0.150	1.395	1.00	1.395		
				Ver	8.840	1.830	0.150	2.427	1.00	2.427		
3.	5.03.04.01	Mass concrete work in foundation or floor with Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.20) and 20mm down well graded 1st class/picked brick chips (LAA value not exceeding 38), including shuttering, mixing by concrete mixer machine, casting, laying compacting with mechanical vibrator machine and curing for the requisite period breaking bricks into chips etc. all complete as per direction of the E-I-C. Cylinder crushing strength of concrete should not be less than 10.5Mpa at 28 days of curing (suggested mix proportion 1:3:6). Additional quantity of cement to be added if required to attain the strength at the contractors own cost. Mass concrete in foundation (1:3:6) with Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.20) and 20mm down well graded 1st class/picked brick chips.	cum	Toilet	1.830	1.220	0.050	0.112	1.00	0.112		
				Main floor	6.860	3.050	0.075	1.569	1.00	1.569		
				Main floor-1	3.050	3.050	0.075	0.698	1.00	0.698		
				Ver	8.840	1.830	0.075	1.213	1.00	1.213		

SL No.	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13
4.	5.03.09	Providing single layer polythene sheet (0.18mm thick) weighing one kilogram per 6.5 square meter in floor or any where in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C.	sqm									
				Step	1.500	0.900		1.350	1.00	1.350		
				Main floor	11.330	3.250		36.823	1.00	36.823		
				Main floor	3.220	3.250		10.465	1.00	10.465		
				Ver	8.270	1.510		12.488	1.00	12.488		
										61.126	20.78	1270.20
5.	5.04.01	Brick work with 1st class bricks in cement mortar (1:6) in foundation and plinth with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2), filling the interstices tightly with mortar, raking out joints, cleaning and soaking bricks at least for 24 hours before use, washing of sand, curing for requisite period, etc. all complete as per direction of the E-I-C.	cum									
				M/Wall GB	32.600	0.250	0.350	2.853	1.00	2.853		
				Verandha	14.320	0.250	0.760	2.721	1.00	2.721		
				Toilet	6.710	0.250	0.450	0.755	1.00	0.755		
										6.329	7454.47	47179.34
6.	5.04.09.01. 1	125mm brick work with Kiln 1st class bricks/automatic machine made 1st class bricks in cement mortar (1:6) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) and making bond with connected walls with uniform width and depth joints, true to vertical and horizontal lines in/c necessary scaffolding, raking out joints, cleaning and soaking the bricks at least for 24 hours before use, washing of sand, curing for requisite period, etc. all complete as per direction of the E-I-C. Kiln bricks Ground Floor	cum									
				M/Wall GB	32.600	2.740		89.324	1.00	89.324		
				Kitchen	5.790	1.830		10.596	1.00	10.596		
				Toilet	6.710	1.830		12.279	1.00	12.279		
				Deduction				0.000	1.00	0.000		
				Door	2.130	0.910		1.938	3.00 (-)	5.814		
				Door-1	1.830	0.760		1.391	3.00 (-)	4.173		
				Window	1.060	0.760		0.806	6.00 (-)	4.836		
										97.376	1126.21	109665.82

SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13

7. 5.05.01.01 RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, $f_{cr} = 24$ Mpa and satisfied a specified compressive strength $f_c = 17$ Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197-1 : 2003 CEM-II 42.5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hopper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm (when plasticizer use), pouring, casting, compacting by mechanical vibrator machine and curing at least for 28 days, removing centering-shuttering after approved specified time period, i/c cost of additional testing charges of materials and cylinders required. Excluding the cost of reinforcement and its fabrication, welding, coupling, placing, binding etc. Additional quantity of cement and Plasticizer i.e. Water reducing chemical admixture of complying type A under ASTM C 494 to reduce mixing water required for normal workability and to maintain low water-cement (W/C) ratio (Doses of admixture to be fixed by the mix design from approved laboratory instruction by the Engineer) Additional quantity of cement to be added if required to attain the strength at the contractor's own cost) etc. all complete as per direction and approval of the Engineer in charge.
Note : Using Concrete Mixer.
In individual and continuous footing of column, raft and floor slab at plinth level.

Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
Col. Base	0.750	0.750	0.125	0.070	8.00	0.560		
Lintel	36.250	0.125	0.150	0.680	1.00	0.680		
Shed	1.060	0.300	0.062	0.020	6.00	0.120		
main col.	1.220	0.250	0.250	0.076	8.00	0.608		
main wall GB	32.600	0.250	0.250	2.038	1.00	2.038		
							4.006	10158.92
								40696.63

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SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13

8.	5.06.01.01	Supplying and fabrication of Ribbed or deformed bar reinforcement for all types of RCC work including straightening, removing ruts, cleaning, cutting, hooking, bending, lapping and/or welding wherever required as directed, placing in position, tying with 22 BWG black annealed binding wire (PVC coated in case of FBEC rebar) double fold, cost of binding wire and anchoring to the adjoining members wherever necessary, supplying and placing with proper cover blocks (1:1), supports, chairs, spacers, splices or laps etc. including cost of all materials, cost of labour, cost of equipment & machinery, loading and unloading, transportation, all other incidental charges and work at all leads and lifts etc. to complete the work as per design, drawing, specifications and direction of the E-I-C. Measurement relating to nominal mass, dimensions and tolerances of various types of steel shall conform to relevant BDS/ ASTM codes. Reinforcement shall be measured only in lengths of bar as actually placed in position on standard weight i.e. 7850 kg/m3 (BNBC Table 6.2.1) basis. No separate payment shall be allowed for Chairs of any shape & profile, spacer bar of any shape & profile, lap/ splice unless otherwise shown in the drawing, wastages, binding wire, concrete cover blocks etc. as the cost of these is included in the unit rate. Note: Tests for reinforcing bars shall be conducted at LGED/ BUET/ CUET/ KUET/ RUET. Grade 300 (RB 300): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield strength, fy (ReH) = 300 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 16% and 2.5% respectively.	kg									
				Lintal main rod 10mm	36.250	0.617		22.366	4.00	89.464		
				Strup	0.400	0.223		0.089	238.00	21.182		
				main col. Base	0.750	0.617		0.463	96.00	44.448		
				Shed	0.450	0.617		0.278	25.00	6.950		
				Binder	1.060	0.223		0.236	17.00	4.012		
				GB	36.250	0.617		22.366	4.00	89.464		
				strup	1.000	0.223		0.223	202.00	45.046		
										300.566	89.33	26849.56

SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13

9.	5.07.04.01	Supplying and making well matured natural seasoned solid wood works in frames of roof truss of required length and size with wall plates as per design in/c supplying, fabricating, hoisting, scaffolding, fitting and fixing in position with bolts and nuts for all floors etc. all complete as per direction of the E-I-C. (All sizes of wood are finished). Garjan wood	cum	wall plate main room	28.230	0.050	0.050	0.071	1.00	0.071		
				Rafter main	2.130	0.050	0.050	0.005	40.00	0.200		
				purline ver	9.750	0.050	0.025	0.012	4.00	0.048		
				rafter ver	2.280	0.050	0.050	0.006	15.00	0.090		
				queen post	0.750	0.062	0.050	0.002	10.00	0.020		
				purlin main room	27.430	0.050	0.025	0.034	4.00	0.136		
				wall plate Verandah	10.670	0.050	0.050	0.027	1.00	0.027		
				Tie beam	3.050	0.075	0.050	0.011	5.00	0.055		
				Toilet Purline	2.440	0.038	0.025	0.002	3.00	0.006		
				Toilet Rafter	1.830	0.038	0.038	0.003	3.00	0.009		
										0.662	104155.32	68950.82

10.	5.08.12.02	Supplying, fitting and fixing combined steel window shutter, frames and grill welded together as per drawing & design having requisite Nos. of vertical and horizontal standard MS (19mmx19mmx3mm) 'Z' section for shutter and MS flat bar all around (25mmx4.5mm) and (19mmx3mm), 10mm square bar as grill welded horizontally @ 100mm c/c, only catch locking handle position gap should 125mm, at inner face of window frame with F.I. clamp 75mmx3mm duly embedded with Cement Concrete (1:2:4) and mending good the damages in/c all cost of charges for fabrication and manufacture by welding, riveting, etc. supplying all essential fittings like stopper, handle, 3 nos catch hook 300mm long adjustable iron cleat, 50mm long pin hinge in/c supplying, fitting, fixing 18 BWG M.S. sheet in position welded to steel shutter with Tee stiffener (2 nos.) made with 25mm and 19mm flat bars fitted to shutter frame in Two equal part and upper part should be provided with 5mm clear glass, vertically in each shutter panel and putty and painting the window with two coats of synthetic enamel paint over a coat of anticorrosive priming, , etc for all floors. all complete as per direction of the E-I-C	sqm	window	1.060	1.210		1.283	6.00	7.698		
										7.698	4039.08	31092.84

11.	5.08.20	Supplying fitting and fixing steel door shutter with 18 BWG MS sheet/plain plate hinged to RCC columns reinforcement with 38mmx38mmx5mm MS Angle and 25mmx6mm flat bar stiffener etc. all complete as per drawing and direction of E-I-C.	sqm	door	2.130	0.750		1.598	2.00	3.196		
				door-1	2.130	0.900		1.917	3.00	5.751		
										8.947	4469.22	39986.11

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SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13
12.	5.09.01.01	Supplying, fitting and fixing 0.46mm (26 SWG) thick galvanized iron corrugated sheet (Bangladesh made)having minimum weight 63-65 kg per bundle (2'-6" width 70 - 72 rft long) roofing fitted and fixed on MS sections with 'J' hook or wooden purlins with screws, limpet washers, bitumen washers and putty etc. all complete as per direction of the E-I-C.	sqm	main roof out side	14.000	2.440		34.160	1.00	34.160		
				main roof in side	8.840	2.440		21.570	1.00	21.570		
				verandha	10.670	2.130		22.727	1.00	22.727		
				Toilet room	2.130	2.740		5.836	1.00	5.836		
				main roof side	2.130	2.440		5.197	1.00	5.197		
										89.490	771.12	69007.53
13.	5.09.02.02	0.46mm (26 SWG) thick color iron plain sheet ridging with 300mm lap on either side fitted and fixed with galvanized bolts and nuts etc. all complete as per direction of the E-I-C.	m	Ridge cover	7.900			7.900	1.00	7.900		
					2.740			2.740	6.00	16.440		
										24.340	379.23	9230.46
14.	5.10.02	Supplying, fitting and fixing window grills or any where directed of any design made of mild steel F.I bar inner section (20mmx3mm) with outer frame of F.I. bar (25mmx6mm), fabricating, welding of each point, cost of electricity, workshop charge, carriage, fixing with M.S. clamps or steel royal bolt in walls/RCC member painting with two coats of synthetic enamel paint over a coat of anticorrosive priming for all floors etc. all complete as per direction of the E-I-C. (Total wt. per m2 should be 11.00 kg. For each kg excess or less add or deduct, as the case may be, @Tk. 140.00 per kg)	sqm	fan light	0.600	0.450		0.270	1.00	0.270		
										0.270	2275.37	614.35
15.	5.12.01	Minimum 12mm thick cement plaster (1:4) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) to dado, plinth wall up to 150mm below ground level, water tank or any where directed with neat cement finishing in/c washing of sand, racking out joint and picking up cement mortar i/c finishing the edges and corners and curing for the requisite period etc. all complete as per direction of the E-I-C.	sqm	M/Wall GB	32.600	2.740		89.324	2.00	178.648		
				Kitchen	5.790	1.830		10.596	2.00	21.192		
				Toilet	6.710	1.830		12.279	2.00	24.558		
				Deduction				0.000	1.00	0.000		
				Door	2.130	0.910		1.938	6.00 (-)	11.628		
				Door-1	1.830	0.760		1.391	6.00 (-)	8.346		
				Window	1.060	0.760		0.806	12.00 (-)	9.672		
										194.752	280.30	54588.99

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SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of Item	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13
16.	5.16.02.01	Colour wash with yellow orchre in two coats over a prime coat of white wash. Lime mix prepared at least 12 hours before use in/c removing the floating materials from the mixture, surface cleaning to free from all foreign materials before application of each coat. Applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat i/c cost of hair brush, providing necessary scaffolding and necessary cleaning the plinth, floors, doors, windows, portions and ventilators by washing, rubbing, as necessary before and after the wash, polishing the surface with sand paper etc. all complete for all floors i/c cost of all materials as per direction of the E-I-C.	sqm	M/Wall	32.600	2.740		89.324	1.00	89.324		
				Kitchen	5.790	1.830		10.596	1.00	10.596		
				Toilet	6.710	1.830		12.279	1.00	12.279		
				Deduction				0.000	1.00	0.000		
				Door	2.130	0.910		1.938	3.00 (-)	5.814		
				Door-1	1.830	0.760		1.391	3.00 (-)	4.173		
				Window	1.060	0.760		0.806	6.00 (-)	4.836		
17.	5.16.03.03	Cement paint of approved quality and colour (Bangladesh made) from authorized manufacturer in a seal container, having highly water resistant, high bond ability, flexible in one coats. Applying one vertical and one horizontal coat for each coat and successive coat is to be applied after drying up of previous coat by brush/roller/spray in/c cleaning the plinth, floors, doors, windows, portions and ventilators by washing, rubbing, as necessary and sand papering the surface and necessary scaffolding, etc. curing for the requisite period etc. all complete for all floors i/c cost of all materials as per direction of the E-I-C.	sqm	M/Wall	32.600	2.740		89.324	1.00	89.324		
				Kitchen	5.790	1.830		10.596	1.00	10.596		
				Toilet	6.710	1.830		12.279	1.00	12.279		
				Deduction					1.00	1.000		
				Door	2.130	0.910		1.938	3.00 (-)	5.814		
				Door-1	1.830	0.760		1.391	3.00 (-)	4.173		
				Window	1.060	0.760		0.806	6.00 (-)	4.836		
18.	5.16.10.03	Painting to door and window frames, shutters and any type of MS rod, FI bar, MS box, MS angle grill, gate etc. in one coats with synthetic enamel paint of best quality and approved colour. Applying one vertical and one horizontal coat for each coat and successive coat is to be applied after drying up of previous coat by brush/roller/spray in/c cleaning, washing, rubbing, as necessary and sand papering the surface and necessary scaffolding, etc. all complete for all floors i/c cost of all materials as per direction of the E-I-C.	sqm	door	2.130	0.750		1.598	2.00	3.196		
				door-1	2.130	0.900		1.917	3.00	5.751		
				window	1.060	1.210		1.283	6.00	7.698		
19.	7.01.01.01	Supplying, fitting and fixing Bangladesh pattern "BISF STANDARD" Long Pan (Model-314E, size 525mmx 295mmx 285mm, Bowl size-410mmx 225mm x 170mm or equivalent) with foot rest of vitreous China and preparing the base of pan with cement concrete (1:2:4) and wire net or rods including making holes wherever required and mending good the damages, etc. all complete as per direction of the E-I-C White [BISF STANDARD]	each	pan				1.000	2.00	2.000		
												2.000


SL No	Item Code	Description of Work	Unit	Location / Component	Length	Width	Height / Depth	Area / Volume	No of	Total Qty of Works	Unit Rate	Amount
1	2	3	4	5	6	7	8	9	10	11	12	13
20.	7.07.01.01	Supplying, fitting and fixing Standard Size porcelain soap tray fitted with rowel plug and screw including making holes in walls by drill machine and mending good the damages etc. all complete as per direction of the E-I-C. White (150mmx110mmx40mm size)	each	soap tray				1.000	2.00	2.000	265.20	530.40
21.	7.07.04.01	Supplying, fitting and fixing Towel rail with holder fitted with rowel plug and screw including making holes in walls by drill machine and mending good the damages etc. all complete as per direction of the E-I-C. C.P. Towel rail (Size : 600mmx20mm) with C.P. holder (Super quality)	each	towel rail				1.000	1.00	1.000	1164.08	1164.08
22.	7.07.05.02	Supplying, fitting and fixing super quality unframed 5mm thick Mirror with hard boards at the back with all necessary fittings fitted with rowel plug and screw including making holes in walls by drill machine and mending good the damages etc. all complete as per direction of the E-I-C.	each	mirror				1.000	1.00	1.000	683.40	683.40
23.	7.11.06	Construction of soak or leaching pit including supplying and fitting of 760mm dia 38mm thick 305mm height RCC (1:2:4) ring with 3 layers of No. 10 BWG wire as reinforcement placing in position one above another at equal spacing, placing in position, filling interstices with local sand, placing pit, jointing with 1:6 sand-cement mortar, making hole to RCC ring for inlet pipe and vent pipe including all fittings and jointing including labour, site cleaning, all complete as per drawing and direction of	per	sock well				5.000	1.00	5.000	368.24	1841.20


TOTAL SCHEME AMOUNT: 551,092.19

SAY: 551,092.00

In Word : Taka (Five Lac Fifty-One Thousand Ninety-Two) Only


 মোঃ আবুল বাশার মোহাম্মদ
 সহকারী প্রকৌশলী
 আশ্রয়ণ-২ প্রকল্প
 প্রধানমন্ত্রীর কার্যালয়।


 ২৫/৪/২৪
 মোঃ আনোয়ার রহমান
 উপ-প্রকল্প প্রকৌশলী
 আশ্রয়ণ-২ প্রকল্প
 প্রধানমন্ত্রীর কার্যালয়


 আবুল কালাম আজাদ
 প্রকল্প প্রকৌশলী
 আশ্রয়ণ-২ প্রকল্প
 প্রধানমন্ত্রীর কার্যালয়