

Clarks Amer, Jaipur					
BOQ for 20 villas					
DATE 10/10/2018					
S. NO.	DESCRIPTION OF ITEMS	UNIT	Quantity	Rate	Amount
1	EARTH WORK				
1.1	Clearing jungle including uprooting rank vegetation, grass, brush wood, trees and saplings of girth upto 30cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50m outside the periphery of the area cleared As direction of site incharge.	SQM			
1.2	Earth work in excavation by mechanical means/manual means in foundation trenches including dressing of sides and ramming of bottoms for all kinds of soil including back filling of excavated soil in trenches,plinth,sides of foundations etc.in layers not exceeding 200mm in depth , consolidating each layer by ramming and watering complete and disposing off all excess soil within a lead of 200mm as per directions of site in charge to his entire satisfaction. Bottom width excavation shall be measured as given in foundation drawings and details showing the width of the bedding concrete only and hence side clearance if will not be measured separately. The contractor should cover this in his rate.				
1.2(a)	depth up to 1.5M	CUM	1951.00		
1.2(b)	earth filling 75mm thickness	CUM	180.00		
1.2(c)	Add extra for excavation in gravel and boulders up to 40% gravel.	CUM			
1.2(d)	Same as 1.1 but for cutting in hard rock with machinery 1.5M depth or part there of beyond 6M depth.	CUM			
	The decision of the Project Manager shall be final and binding on contractor regarding the type of soil.				
1.3	Filling and banking with approved good quality earth from outside in trenches, plinth, side of foundations etc., in layers not exceeding 200mm In depth, consolidating each deposited layer by ramming and watering complete as per direction of the site in charge to his entire satisfaction.	CUM	2500.00		
	Same as item no 1.3 but material available from inside the project site.	CUM			
1.4	Providing and injecting chemical antitermite treatment; conforming to IS 6313 part II that shall create a chemical barrier under and around the foundation pits, along external perimeter in vertical height of building, etc.; all complete and conforming to IS. specifications and as per approved manufacturer's instructions and recommendation, and installed by manufacturer's approved agency with a guarantee of 10 years, all to the satisfaction of the site in charge. (Plinth area in plan at ground level shall be measured.)	SQM	2946.00		
2	CONCRETE WORK				
2.1	Providing and laying, mechanically mixed 1:3:6 plain cement concrete (P.C.C.), using 20mm nominal size well-graded approved quality aggregate river sand as approved, including compacting, curing, cleaning preparing surfaces, junctions etc. excluding shuttering complete to the satisfaction of the site in charge at all depths and leads.	CUM	648.00		
2.2	Providing and laying, design mix grade M-25, reinforced cement concrete (R.C.C.) in sub structure by using minimum 410 kg of cement per cum of concrete for slabs, columns & footing, etc. using 20 mm nominal well-graded approved quality aggregate and river sand as per approved design mix; using approved admixtures including pumping, pouring, spreading, vibrating/ compacting, curing, scaffolding, cleaning, preparing surfaces, junctions, hacking closely in surfaces to be plastered etc., excluding reinforcement & centering/shuttering , complete to the satisfaction of the site in charge at all depths, heights & leads.	CUM	230.00		
2.3(a)	Add over item no. 2.2 for providing richer/lesser mixes respectively at all floors and all heights and depths instead of M25 grade of Concrete.				
2.3(b)	M20 grade concrete	CUM			
2.3(c)	M30 grade concrete	CUM			
2.3(e)	M45 grade concrete	CUM			
2.4	Providing and laying water proof layer of film of HDPE sheet (0.2 Kg./Sq.M) on sub base to receive PCC/RCC base slab above the film to be over lapped over Damp proof course (DPC) provided on the wall.	SQM	RATE ONLY		
3	REINFORCEMENT WORK				
3.1	Providing, Laying, fabricating and fixing in position steel reinforcement in all reinforced concrete work, including straightening, cutting, removal of loose rust by wire brush and coating with cement slurry, bending, hoisting, laying in position to the shape and profile required at all levels and heights as per drawing and design and / or as directed, binding with 18 gauge MS annealed wire, the rate shall be including providing and placing Chairs (which shall not be measured for payment sepraty), separators, approved pre cast concrete spacer blocks etc. complete all to the satisfaction of the site in charge at all depths & leads.				
	Tor HYSD bars - Fe - 500 grade.	Kg	30000.00		
4	CENTERING & SHUTTERING				

	Providing, and fixing form work (Centering/ shuttering) of any shape and design, with required height of staging & supporting and its removal etc. complete to the satisfaction of the site in charge up to 5M height.				
a)	Footing	SQM			
b)	Column	SQM			
c)	Plinth beam	SQM			
d)	Slab and beam	SQM	1900.00		
e)	Arches , Domes , Vaults etc.	SQM			
f)	retaining walls	SQM			
5	MASONRY WORK				
5.1	Providing and constructing stone masonry in sub structure with locally available stone with cement mortar CM 1:6 cement mortar (1 cement : 6 sand) laid in specified courses including raking out joints, curing, doing independent double legged scaffolding, all complete as per specifications etc. at all heights depths & leads, all as directed by site in charge to his entire satisfaction.	CUM	1160.00		
5.2	Providing and constructing 230mm or more thick masonry in super structure with locally available first quality bricks having minimum crushing strength 75 Kg/Sq. cm and water absorption maximum 20% in cement mortar CM 1:6 cement mortar (1 cement : 6 sand) laid in specified courses of approved bond and including raking out joints, curing, doing independent double legged scaffolding, all complete as per specifications etc. at all heights depths & leads, all as directed by site in charge to his entire satisfaction for all heights and levels. if fly ash brick are used , the sample of bricks shall be got approved for quality & strength	CUM	268.00		
5.3	Providing and constructing half brick (115mm thick) masonry in sub structure with locally available first quality bricks having minimum crushing strength 75 Kg/Sq. cm and maximum water absorption 20%, in cement mortar CM 1: 4 (1 cement : 4 sand) laid in specified course of approved bond complete with raking out joints, curing, doing independent double legged scaffolding, as per specifications etc. at all heights & leads, all as directed by site in charge to his entire satisfaction including providing 40X3mm M.S flat as hoop iron on every fourth course for all heights and levels.	SQM	345.00		
5.4	Providing and constructing brick masonry sandwich wall with locally available first quality bricks having minimum crushing strength 100 Kg/Sq. cm and maximum water absorption 20%, in cement mortar CM 1: 4 (1 cement : 4 sand) laid in specified course of approved bond complete with raking out joints, curing, doing independent double legged scaffolding, as per specifications etc. at all heights & leads, comprising of 230mm outer wall and 115mm inner wall with 50mm thick thermocool sheet density 23kg/cum placed in between the two walls and to have 40x3mm flat on every fourth course and providing 40X3 mm and 300 long pieces of flat at every 1 meter for boundary the 230 & 115 mm walls together. . The total job is to be under carefully supervision of site in charge and to his entire satisfaction.	SQM			
5.5	Providing and constructing brick masonry sandwich wall with locally available first quality bricks having minimum crushing strength 100 Kg/Sq. cm and maximum water absorption 20%, in cement mortar CM 1: 4 (1 cement : 4 sand) laid in specified course of approved bond complete with raking out joints, curing, doing independent double legged scaffolding, as per specifications etc. at all heights & leads, comprising of 230mm outer wall and 230mm inner wall with 50mm thick thermocool sheet density 23kg/cum placed in between the two walls and to have 40x3mm flat on every fourth course and providing 40X3 mm and 300 long pieces of flat at every 1 meter for boundary the 230 & 115 mm walls together. . The total job is to be under carefully supervision of site in charge and to his entire satisfaction.	SQM			
5.6	exposed stone masonry outer walls 12 inches thick	cum	950.00		
6	PLASTERING WORK				
6.1	Providing and applying 12-15 mm thick INSIDE plaster in cement mortar mix ratio CM 1:4 (1 cement : 4 sand) to internal surfaces (wall) of concrete and masonry work; including preparing junctions of concrete and masonry by neat cleaning; also providing and fixing expanded metal mesh of approved quality @ 150mm wide to junctions of concrete and masonry fixing with screws and washers & panel plug, preparing, jambs, sills, rounding of corners, etc. all complete as per architectural drawings, finished smooth with wooden rundha etc, or as specified by the Architect / site in charge; at all leads , depth and lifts, doing independent double - legged scaffolding, cleaning of surfaces, curing, etc. complete as per specification and to the approval of the site in charge.	SQM	7100.00		
6.2	Roof Plaster				
6.3	Providing and applying 20mm or more coat with required water proofing compound outside plaster in cement mortar mix ratio CM 1:4 (1 cement : 4 sand) to outside surfaces of concrete and masonry work in 2 or more course. First course is to be 19 mm thick include cleaning and providing and fixing expanded metal mesh of approved quality @ 150mm wide to junctions of concrete and masonry fixing with screws and washers & panel plug, preparing, jambs, etc. all complete as per architectural drawings. second / third course is to be 12mm thick as ornamental plaster showing all relief and design patterns, chiri patti, pan patta, molding etc complete in all respect as specified and to complete satisfaction of the architect and as shown in drawings including all leads , depth and lifts, doing independent double - legged scaffolding, curing, etc.	SQM			

	RAIN WATER PIPE FIXING WORK				
7	Fixing, jointing and testing in position of ISI marked UV stabilized 150 MM dia PVC pipes for Rain water pipeType-B (Pressure rating min. 6 Kg./Cm ²) as per IS : 13592 suitable for rubber ring joints, including all necessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducing bush, reducers, after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382.	RM			
7.1	WATER-PROOFING WORK OVER TERRACE				
	Providing and laying waterproofing at Main building terrace as per below mentioned specifications with 10 years guarantee on stamp paper from the date of completion.	SQM			
7.2	(I) Thorough cleaning of surface by mechanical means and high speed electrical air blowers. (II) Grouting all the visible cracks by gravity using low viscosity epoxy system. Resin 505C & Hardener EH-408 system of Elantas Beck USA and repair of all the pot holes by epoxy mortar prepared in Resin 505C & Hardener EH-411. (III) Application of one coat of Zentrifix Elastic waterproofing system on the whole surface and simultaneously providing fiberglass cloth when the coat is wet. (IV) Application of another two coat of Zentrifix Elastic waterproofing system to have sufficient thickness of the treatment. (V) Water ponding of the whole area for 48 hours to check the system against water percolation	SQM			
8	Providing 50mm thick cc coping of 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) as per standard practice on full width of wall with drip course as per drawing.	RM			
10.1	brick bat coba for roof	SQM	5.00		
	providing and laying integral cement based water proofing treatment including preparations of surface as required for treatment of roofs, balconies, terraces etc consisting of following sequence				
10.1(a)	applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS.2645 and approved by engineer-in-charge over RCC slab including adjoining walls upto 300mm height including the surface before the treatment.				
10.1(b)	laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5(1 cement :5 coarse sand) admixed with water proofing compound conforming to IS :2645 and approved by engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5(1 cement :5 coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by engineer-in-charge to required slope and treating similarly the adjoining walls upto 300mm height including rounding of junctions of walls and slabs.				
10.1(c)	after two days of proper curing applying a second coat of cement slurry using 2.75kg/sqm of cement admixed with water proofing compound conforming to IS :2645 and approved by engineer-in-charge.				
10.1(d)	finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS :2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep				
10.1 (e)	the whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test . All above operations to be done in order and as directed and specified by engineer -in-charge.				
10.2	with average thickness of 120mm and minimum thickness at khurra as 65 mm				
11	kota stone flooring (leather finish)	SQM	2360.00		
12	providing and fixing 50mm thick cement concrete flooring with metallic concrete hardener topping , under layer of 38mm thick cement concrete 1:2:4 (1-cement :2-coarse sand :4-graded stone aggregate 20 mm thick nominal size) and top layer of 12mm thick metallic concrete hardener consisting of mix 1:2(1 cement :2 stone aggregate, 6mm nominal size) by volume & mixed with metallic hardening compound of approved quality @2kg/sqm including cement slurry ,rounding off edges etc. but excluding the cost of nosing of step etc . complete.	SQM			
km	MISCELLANEOUS WORK				
a)	Providing and fixing up to 400 mm long sleeves in position as directed in brick/RCC walls, ceiling including making holes, grouting etc complete as directed by project manager.				
i)	M.S. sleeves				
ii)	150 mm Dia. (Including 12mm dia MS bar hold fast)	Nos	Rate only		
b)	100 mm Dia. (Including 12mm dia MS bar hold fast)	Nos	Rate only		
i)	P.V.C. sleeves				
ii)	150mm dia	Nos	Rate only		
iii)	100 mm dia	Nos	Rate only		
C)	STONE patti slab	SQM	394.00		
D)	stone chajha ,fixing in cutout area	SQM	108		
E)	UPVC windows (as per drawings)				