

TS Register No: 1805/2020-2021

AS Register No:1884/2020-2021

**KUMARAKOM - CHEEPUNKAL DESTINATION DEVELOPMENT PROJECT AT
AYMANAM PANCHAYATH, KOTTAYAM DISTRICT**

Detailed Estimate

(Dsor year: 2016, Cost Index Applied for this estimate is 37.93%)

SI No	Description	No	L	B	D	CF	Quantity	Remark
1 Appendix A:House-boat jetty								
1	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform							
	Slab	1	150.000	3.600			540.000	
		2	150.000		0.150		45.000	
		2	3.600		0.150		1.080	
		4	3.600		0.600		8.640	
							Total Quantity	594.720 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	594.720 sqm
							Say 594.720 sqm @ Rs 582.48 / sqm	Rs 346412.51
2	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers							
	beams	2*51	3.300		0.250		84.150	
		1*51	3.300		0.300		50.490	
		2*100	3.300		0.250		165.000	
		1*100	3.300		0.300		99.000	
		2*19	3.300		0.300		37.620	
		1*19	3.300		0.250		15.675	
		2*34	3.300		0.250		56.100	
		1*34	3.300		0.300		33.660	
	For extension of pile	4*30		0.300	1.200		43.200	
							Total Quantity	584.895 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	584.895 sqm
							Say 584.895 sqm @ Rs 472.96 / sqm	Rs 276631.94

3	20.6.1.1 Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge.Single pile upto 50 tonne capacityInitial test							
		1					1.000	
	Total Quantity						1.000 per test	
	Total Deducted Quantity						0.000 per test	
	Net Total Quantity						1.000 per test	
	Say 1.000 per test @ Rs 53188.29 / per test						Rs 53188.29	
4	60.7.1 DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site							
	Over the existing structure	1	130.000	0.650	0.800		67.601	
	Total Quantity						67.601 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						67.601 cum	
	Say 67.601 cum @ Rs 2647.29 / cum						Rs 178959.45	
5	60.64.1 Coconut Pile - Supplying and stacking well matured straight coconut post for driving down through various strata bellow bed level including cost coveyance labour charges etc complete.							
	Fender piles	20			6.000		120.000	
	Total Quantity						120.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						120.000 metre	
	Say 120.000 metre @ Rs 137.06 / metre						Rs 16447.20	
6	60.64.4 Coconut Pile - Driving down coconut pile to lines and levels through variuos strata including all hire charges and labour for fixing , staging platform and all other appliances necessary for pile driving down after pointing the bottom end							
	Fender piles	20			4.000		80.000	
	Total Quantity						80.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						80.000 metre	
	Say 80.000 metre @ Rs 739.31 / metre						Rs 59144.80	

7	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more							
	Wearing coat above retaining wall	1	150.000	0.600	0.150	10.0	135.000	
	beams	52	3.600	0.300	0.250	90.0	1263.601	
		2*50	3.300	0.300	0.250	90.0	2227.500	
	slab	1	150.000	3.600	0.150	90.0	7290.000	
	Extension of piles	1	10.000	0.300	0.300	80.0	72.000	
	slab vertical	1	3.600	0.150	0.600	80.0	25.920	
	Piles	44*2	0.300	0.300	9.000	90.0	6415.200	
		9*2	0.300	0.300	9.600	90.0	1399.680	
	Total Quantity						18828.901 kilogram	
	Total Deducted Quantity						0.000 kilogram	
	Net Total Quantity						18828.901 kilogram	
	Say 18828.901 kilogram @ Rs 78.07 / kilogram						Rs 1469972.30	
8	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)							
	Wearing coat above retaining wall	1	150.000	0.600	0.150		13.500	
	fdn for lamp posts	15	0.700	0.700	0.200		1.470	
		15	0.500	0.500	0.800		3.000	
	Total Quantity						17.970 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						17.970 cum	
	Say 17.970 cum @ Rs 7561.25 / cum						Rs 135875.66	
9	11.48.2 Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg). including filling /grouting and finishing complete as per direction of Engineer-in-charge.Size of Tile 600x600 mm							
		1	150.000	3.600			540.000	
	Total Quantity						540.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						540.000 sqm	

	Say 540.000 sqm @ Rs 230.41 / sqm						Rs 124421.40	
10	od70939/2019_2020 Providing and laying Terracota tiles (thickness to be specified by the manufacturer), 1:3 (1 Cement :3Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.							
		1	150.000	3.600			540.000	
	Total Quantity						540.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						540.000 sqm	
	Say 540.000 sqm @ Rs 1140.36 / sqm						Rs 615794.40	
11	od70972/2019_2020 Conveying RCC piles of Size 300x300mm to the pile driving point by boat from bank and hire of planks, wooden scanting, coir ropes etc, complete							
		106					106.000	
	Total Quantity						106.000 each	
	Total Deducted Quantity						0.000 each	
	Net Total Quantity						106.000 each	
	Say 106.000 each @ Rs 1714.94 / each						Rs 181783.64	
12	2.6.1 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil							
	foundation for lamp posts	16	0.700	0.700	0.700		5.488	
	Total Quantity						5.488 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						5.488 cum	
	Say 5.488 cum @ Rs 173.72 / cum						Rs 953.38	
13	5.33.1 Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level							
	beams	52	3.600	0.300	0.250		14.041	

		2*50	3.300	0.300	0.250		24.750		
	slab	1	150.000	3.600	0.150		81.000		
	Extension of piles	30	1.000	0.300	0.300		2.700		
	slab vertical	2	3.600	0.150	0.600		0.648		
	Total Quantity						123.139 cum		
	Total Deducted Quantity						0.000 cum		
	Net Total Quantity						123.139 cum		
	Say 123.139 cum @ Rs 8891.66 / cum						Rs 1094910.12		
14	od71021/2019_2020 Providing, driving and installing driven Pre-cast reinforced cement concrete piles of size 300x300mmr and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. including centering, shuttering, driving and lifting etc. complete but excluding the cost of steel reinforcement. (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap). 300x300mm piles .								
	Piles	44*2			9.000		792.000		
		9*2			9.600		172.800		
	Total Quantity						964.800 metre		
	Total Deducted Quantity						0.000 metre		
	Net Total Quantity						964.800 metre		
	Say 964.800 metre @ Rs 3140.38 / metre						Rs 3029838.62		
15	od199803/2020_2021 Chipping and removing the top of the RCC Piles to lines and levels carefully without damaging the remaining portion and removing the debris upto distance of 50m. complete								
		106	1.000	0.300	0.300		9.540		
	Total Quantity						9.540 cum		
	Total Deducted Quantity						0.000 cum		
	Net Total Quantity						9.540 cum		
	Say 9.540 cum @ Rs 1742.25 / cum						Rs 16621.07		
16	od86108/2019_2020 Precasting placing in position 150mm dia Bollards 300 mm high providing 200 mm dia SS steel ball at top filled with cement concrete M25 mix joints are welded and with 150x150x8mm MS plate welded at bottom including 16mm dia anchor bolt ,drilling charges, welding etc complete complete as per direction and specification of engineer at site.								
		12					12.000		
	Total Quantity						12.000 each		
	Total Deducted Quantity						0.000 each		

							Net Total Quantity	12.000 each
							Say 12.000 each @ Rs 11418.73 / each	Rs 137024.76
17	10.28	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)						
		1	45.000	1.200			15.0	810.000
							Total Quantity	810.000 kg
							Total Deducted Quantity	0.000 kg
							Net Total Quantity	810.000 kg
							Say 810.000 kg @ Rs 651.58 / kg	Rs 527779.80
SI No	Description	No	L	B	D	CF	Quantity	Remark
2 Appendix B:Improvement of Approach road								
1	60.7.1	DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site						
	Pathway parallel to existing jetty	1	40.000	0.700	0.500		14.000	
		1	40.000	0.500	0.500		10.000	
		1	10.300	1.200	0.500		6.181	
		1	10.300	(1+.5)/2	1.500		11.588	
							Total Quantity	41.769 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	41.769 cum
							Say 41.769 cum @ Rs 2647.29 / cum	Rs 110574.66
2	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil						
	Pathway parallel to existing jetty	1	40.000	0.700	0.500		14.000	
		1	10.300	1.200	0.500		6.181	

	Road adjacent to highway	2	77.000	0.200	0.400		12.320		
		2	5.000	0.200	0.400		0.800		
	below the bridge	2	10.000	0.200	0.400		1.600		
		2	17.500	0.200	0.400		2.801		
		2	5.000	0.200	0.400		0.800		
		2	13.800	0.200	0.400		2.208		
		2	5.000	0.200	0.400		0.800		
		2	15.400	0.200	0.400		2.465		
	Span 2	2	6.800	0.200	0.400		1.088		
		2	11.500	0.200	0.400		1.841		
		Total Quantity						26.723 cum	
		Total Deducted Quantity						0.000 cum	
		Net Total Quantity						26.723 cum	
		Say 26.723 cum @ Rs 7561.25 / cum						Rs 202059.28	
6	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform								
	Pathway parallel to existing jetty	1	50.000	3.400			170.000		
		2	50.000		0.150		15.000		
	beams	34	3.400		0.150		17.340		
	Road adjacent to highway	2	77.000		0.400		61.600		
		2	5.000		0.400		4.000		
	below the bridge	2	17.500		0.400		14.000		
		2	10.000		0.400		8.000		
		2	5.000		0.400		4.000		
		2	13.800		0.400		11.041		
		2	5.000		0.400		4.000		
		2	15.400		0.400		12.320		
		2	6.800		0.400		5.440		
		2	11.500		0.400		9.201		
		Total Quantity						335.942 sqm	

		Total Deducted Quantity						0.000 sqm
		Net Total Quantity						335.942 sqm
		Say 335.942 sqm @ Rs 582.48 / sqm						Rs 195679.50
7	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more							
	beams	17	3.400	0.200	0.150	80.0	138.721	
	Road adjacent to highway	2	77.000	0.200	0.400	60.0	739.200	
		2	5.000	0.200	0.400	60.0	48.000	
	below the bridge	2	10.000	0.200	0.400	60.0	96.000	
		2	17.500	0.200	0.400	60.0	168.001	
		2	5.000	0.200	0.400	60.0	48.000	
		2	13.800	0.200	0.400	60.0	132.481	
		2	5.000	0.200	0.400	60.0	48.000	
		2	15.400	0.200	0.400	60.0	147.841	
	Span 2	2	6.800	0.200	0.400	60.0	65.280	
		2	11.500	0.200	0.400	60.0	110.401	
		Total Quantity						1741.925 kilogram
		Total Deducted Quantity						0.000 kilogram
		Net Total Quantity						1741.925 kilogram
		Say 1741.925 kilogram @ Rs 78.07 / kilogram						Rs 135992.08
8	10.28 Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)							
	existing jetty	1	48.000		1.200	15.0	864.000	
		Total Quantity						864.000 kg
		Total Deducted Quantity						0.000 kg
		Net Total Quantity						864.000 kg
		Say 864.000 kg @ Rs 651.58 / kg						Rs 562965.12
9	60.64.1							

	Coconut Pile - Supplying and stacking well matured straight coconut post for driving down through various strata bellow bed level including cost conveyance labour charges etc complete.							
		6			8.000		48.000	
	Total Quantity						48.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						48.000 metre	
	Say 48.000 metre @ Rs 137.06 / metre						Rs 6578.88	
10	60.64.4 Coconut Pile - Driving down coconut pile to lines and levels through various strata including all hire charges and labour for fixing , staging platform and all other appliances necessary for pile driving down after pointing the bottom end							
		6			6.000		36.000	
	Total Quantity						36.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						36.000 metre	
	Say 36.000 metre @ Rs 739.31 / metre						Rs 26615.16	
11	16.78.2 Construction of granular sub- base by Providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, Carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in- Charge. With material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25							
	Pathway parallel to existing jetty	1	48.500	2.250	0.200		21.826	
	Road adjacent to highway	1	77.000	3.600	0.200		55.440	
	below the bridge	1	17.500	3.600	0.200		12.601	
		1	13.800	3.600	0.200		9.937	
		1	15.400	3.600	0.200		11.089	
	levelling the undulations	1	48.500	2.250	0.150		16.369	
		1	25.000	3.600	0.150		13.500	
	Total Quantity						140.762 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						140.762 cum	
	Say 140.762 cum @ Rs 2869.15 / cum						Rs 403867.29	

SI No	Description	No	L	B	D	CF	Quantity	Remark
3 Appendix C: Solar lighting								
1	od199778/2020_2021 SITC of Solar LED lighting System with following accessories. (a) All in one Solar LED CSADHMP40 CDL, 40W LED Crompton make / Equilant having 60W solar module Wp with 27 Ah battery having 6800lumens having dimensions(Approx) 955 X 630 X 55 (LWH) haing approximate weight of 19Kg (Details attached separately) suitable to fit on tubular pole. (b) Pole :- 3.5/4 Mtr. long (clear height -210kg) armless pole of cast iron with bottom dia.200mm with base plate and top dia. 100mm, foundation bolt etc. complete fixed on existing cement concrete foundation etc. as per the directions of engineer at site as required including 3 year AMC complete.							
	solar LED lighting	15					15.000	
							Total Quantity	15.000 each
							Total Deducted Quantity	0.000 each
							Net Total Quantity	15.000 each
							Say 15.000 each @ Rs 100293.00 / each	Rs 1504395.00
SI No	Description	No	L	B	D	CF	Quantity	Remark
4 7% Centage Charges								
Lump-Sum Total						Rs 837735.78		
SI No	Description	No	L	B	D	CF	Quantity	Remark
Remark	5 GST @ 12 %							
Lump-Sum Total						Rs 1436118.48		
SI No	Description	No	L	B	D	CF	Quantity	Remark
Remark	6 GST @ 18% on centage charges							
Lump-Sum Total						Rs 150792.44		
Provision for GST payments (in %) @							0.0%	
Amount reserved for GST payments						0.00		
Total						14392300.00		
Lumpsum for round off						7700.00		
TOTAL Rs 14400000.00								
Rounded Total Rs 1,44,00,000								
Rupees One Crore Forty Four Lakh Only								

(Cost Index Applied for this estimate is 37.93%)