

**Additional Work I of Eco Lodge Construction at Idukki (Construction of
approachroad , retaining wall, drain and street lighting)**

Detailed Estimate

(Dsr year: 2016, Cost Index Applied for this estimate is 48.71%)

SI No	Description	No	L	B	D	CF	Quantity	Remark
1 Appendix-A-Retaining wall								
1	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 retaining wall	1	163.000	0.500	0.300		24.450	1m height retaining wall
		1	180.000	0.500	0.300		27.000	1m height retaining wall
		1	17.000	1.500	0.450		11.475	1m height retaining wall
							Total Quantity	62.925 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	62.925 cum
							Say 62.925 cum @ Rs 187.30 / cum	Rs 11785.85
2	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)							
	Foundation for retaining wall	1	163.000	0.500	0.300		24.450	1m height retaining wall
		1	180.000	0.500	0.300		27.000	1m height retaining wall
		1	17.000	1.500	0.450		11.475	1m height retaining wall
							Total Quantity	62.925 cum

							Total Deducted Quantity	0.000 cum
							Net Total Quantity	62.925 cum
							Say 62.925 cum @ Rs 6659.46 / cum	Rs 419046.52
3	4.1.6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)						
	Retaining wall Sup structure	1	180.000	0.300	0.600			32.400
		1	163.000	0.300	0.600			29.340
		1	17.000	(1.2+.5)/2	3.000			43.350
							Total Quantity	105.090 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	105.090 cum
							Say 105.090 cum @ Rs 7159.72 / cum	Rs 752414.97
4	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for:Foundations, footings, bases for columns						
	Foundation for retaining wall	2	180.000	0.300			108.000	1m height retaining wall
		2	163.000	0.300			97.800	1m height retaining wall
		2	17.000		0.450		15.300	1m height retaining wall
							Total Quantity	221.100 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	221.100 sqm
							Say 221.100 sqm @ Rs 288.42 / sqm	Rs 63769.66
5	4.3.2	Centering and shuttering including strutting, propping etc. and removal of form work for:Retaining walls, return walls, (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.						
	Retaining wall	2	180.000		0.600		216.000	
		2	163.000		0.600		195.600	

		2	17.000		3.000		102.000	
	Total Quantity						513.600 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						513.600 sqm	
	Say 513.600 sqm @ Rs 563.02 / sqm						Rs 289167.07	
6	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more							
	Retaining wall Sup structure	1	180.000	0.300	0.600	43.0	1393.200	
		1	163.000	0.300	0.600	43.0	1261.620	
		1	17.000	(1.2+5)/2	3.000	43.0	1864.050	
	Total Quantity						4518.870 kilogram	
	Total Deducted Quantity						0.000 kilogram	
	Net Total Quantity						4518.870 kilogram	
	Say 4518.870 kilogram @ Rs 84.17 / kilogram						Rs 380353.29	
Sl No	Description	No	L	B	D	CF	Quantity	Remark
2 Appendix-B-Approach Road and Gate								
1	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							
	Formation cutting for road	1	180.000	(9.6+11.6)/2	4.300		8204.400	
	Excavation for GSB	1	180.000	9.000	0.300		486.000	
	Irish drain cum Kerb on one side	1	180.000	0.600	0.250		27.000	
	Gate							
	Foundation Gate pillars	2	0.600	0.600	0.600		0.432	
	Total Quantity						8717.832 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						8717.832 cum	
	Say 8717.832 cum @ Rs 187.30 / cum						Rs 1632849.93	
2	2.7.3							

	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.Hard rock (blasting prohibited)							
		1	9.000	10.000	0.600		54.000	
	Total Quantity						54.000 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						54.000 cum	
	Say 54.000 cum @ Rs 921.70 / cum						Rs 49771.80	
3	2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared							
		1	100.000	50.000			5000.000	
	Total Quantity						5000.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						5000.000 sqm	
	Say 5000.000 sqm @ Rs 10.71 / sqm						Rs 53550.00	
4	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)							
	Irish Drain Foundation	1	180.000	0.600	0.100		10.800	
	Gate							
	Pillars Foundation	2	0.800	0.800	0.100		0.129	
	Total Quantity						10.929 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						10.929 cum	
	Say 10.929 cum @ Rs 6659.46 / cum						Rs 72781.24	
5	4.1.4 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)1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)							
	Irish Drain	1	180.000	0.600	0.150		16.200	
	Total Quantity						16.200 cum	
	Total Deducted Quantity						0.000 cum	

	Net Total Quantity						16.200 cum	
	Say 16.200 cum @ Rs 8016.14 / cum						Rs 129861.47	
6	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 CBRValue-25							
	GSB for Road	1	180.000	9.000	0.300		486.000	
	Total Quantity						486.000 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						486.000 cum	
	Say 486.000 cum @ Rs 3093.39 / cum						Rs 1503387.54	
7	od63818/2020_2021 Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength,thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 65mm thick compacted bed of 6mm aggregate, compacting and proper embedding/laying of inter locking paver blocks into the 6mm aggregate bedding layer through vibratory compaction by using plate vibrator, finishing the joints properly and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge. 80- mm thick C.C. paver block of M-30 grade with approved color design and pattern.							
	Approach road	1	180.000	9.000			1620.000	
	Total Quantity						1620.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						1620.000 sqm	
	Say 1620.000 sqm @ Rs 972.80 / sqm						Rs 1575936.00	
8	4.1.6 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)							
	Gate							
	Gate pillar foundation	2	0.600	0.600	0.600		0.432	
	Total Quantity						0.432 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						0.432 cum	
	Say 0.432 cum @ Rs 7159.72 / cum						Rs 3093.00	

9	50.6.1.2 Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.							
	Gate							
	Gate Pillars	2	0.450	0.450	2.100		0.851	
	Total Quantity						0.851 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						0.851 cum	
	Say 0.851 cum @ Rs 5839.01 / cum						Rs 4969.00	
10	13.1.2 12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).							
	Gate							
	Pillars sides	2	4*.45		2.100		7.561	
	Do top	2	0.450	0.450			0.405	
	Total Quantity						7.966 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						7.966 sqm	
	Say 7.966 sqm @ Rs 238.46 / sqm						Rs 1899.57	
11	10.25.2 Item Shifted to head 14 as item 14.74 Steel work welded in built-up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works							
	Gate							
	Gate @ 35 kg/ m2	1	4.000		1.800	35.0	252.000	
	Total Quantity						252.000 kg	
	Total Deducted Quantity						0.000 kg	
	Net Total Quantity						252.000 kg	
	Say 252.000 kg @ Rs 127.82 / kg						Rs 32210.64	
SI No	Description	No	L	B	D	CF	Quantity	Remark
3 Appendix C-Drain								
1	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil							

	Drain parallel to the KSEB Road	1	45.000	1.250	$(1.0+.55)/2$		43.594	
	Total Quantity						43.594 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						43.594 cum	
	Say 43.594 cum @ Rs 247.45 / cum						Rs 10787.34	
2	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)							
	Drain parallel to the KSEB Road	1	45.000	1.250	0.100		5.625	
	Total Quantity						5.625 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						5.625 cum	
	Say 5.625 cum @ Rs 6659.46 / cum						Rs 37459.46	
3	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)							
		2	45.000	$(.3+.2)/2$	0.450		10.125	
	Total Quantity						10.125 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						10.125 cum	
	Say 10.125 cum @ Rs 7326.94 / cum						Rs 74185.27	
4	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	1	45.000	0.450	0.050		1.013	
	Total Quantity						1.013 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						1.013 cum	
	Say 1.013 cum @ Rs 8152.21 / cum						Rs 8258.19	
5	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete							

	Sides	4	45.000		0.450		81.000	
	Total Quantity						81.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						81.000 sqm	
	Say 81.000 sqm @ Rs 288.42 / sqm						Rs 23362.02	
6	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more							
		2	45.000	(.3+.2)/2	0.450	60.0	607.500	
	Total Quantity						607.500 kilogram	
	Total Deducted Quantity						0.000 kilogram	
	Net Total Quantity						607.500 kilogram	
	Say 607.500 kilogram @ Rs 84.17 / kilogram						Rs 51133.28	
SI No	Description	No	L	B	D	CF	Quantity	Remark
4 Appendix D - Street Lighting								
1	7.1.1 Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade offollowing size direct in ground including excavation, sand cushioning, protective covering andrefilling the trench etc as required.Upto 35 sq. mm							
	7.1.1	150					150.000	
	Total Quantity						150.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						150.000 metre	
	Say 150.000 metre @ Rs 306.34 / metre						Rs 45951.00	
2	od63814/2020_2021 Supply of 6sqmm 4core PVC/XLPE insulated armoured cable with aluminium conductors for working voltage upto and including 1100V conforming to IS1584/Part I/1988 for PVC & IS7098 PartI for XLPE							
	od52411/2020_2021	200					200.000	
	Total Quantity						200.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						200.000 metre	
	Say 200.000 metre @ Rs 109.00 / metre						Rs 21800.00	
3	9.1.1 Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.2 X 6 sq. mm (19mm)							

	9.1.1	30					30.000	
	Total Quantity						30.000 set	
	Total Deducted Quantity						0.000 set	
	Net Total Quantity						30.000 set	
	Say 30.000 set @ Rs 233.47 / set						Rs 7004.10	
4	od63815/2020_2021 Supply and laying of one number of 10 SWG Copper wire in existing trench.							
	od53434/2020_2021	200					200.000	
	Total Quantity						200.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						200.000 metre	
	Say 200.000 metre @ Rs 50.95 / metre						Rs 10190.00	
5	od63816/2020_2021 Supply Conveyance, installation, testing and commissioning of new generation post top environment friendly, energy saving, long life, aesthetically designed with symmetrical light distribution spun aluminium landscape luminaire with high power LED as light source. 25W 5600K, with IP65 protection suitable for 76mm dia. pole. (Havells Ruby clear or equivalent)							
	od53435/2020_2021	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 6283.79 / each						Rs 94256.85	
6	90.3.17.3 Supply, conveyance and erection of the following sizes of 'B' class GI pipe in single section for post top lantern of all types on concrete base (excluding charges for concrete base and excavation) and painting with 2 coats of synthetic enamel paint over a coat of zinc chromate primer etc. as required.50 mm dia GI pipe							
	90.3.17.3	60					60.000	
	Total Quantity						60.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						60.000 metre	
	Say 60.000 metre @ Rs 569.89 / metre						Rs 34193.40	
7	od63817/2020_2021 Supply and fitting 167x125mmx82mm) Sintex cable junction box (on existing lamp post using suitable clamps.							
	od53436/2020_2021	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 731.20 / each	Rs 10968.00	
SI No	Description	No	L	B	D	CF	Quantity	Remark	
5 Centage Charges @8%									
Lump-Sum Total							Rs 592518.64		
SI No	Description	No	L	B	D	CF	Quantity	Remark	
6 GST @12%									
Lump-Sum Total							Rs 888777.96		
SI No	Description	No	L	B	D	CF	Quantity	Remark	
7 18% GST on Centage Charges									
Lump-Sum Total							Rs 106653.36		
Provision for GST payments (in %) @							0.0%		
Amount reserved for GST payments							0.00		
Total							8994433.00		
Lumpsum for round off							5567.00		
							TOTAL Rs 9000000.00		
Other Engineering Organisations							Rounded Total Rs 90,00,000		
PRICE							Rupees Ninety Lakh Only		

(Cost Index Applied for this estimate is 48.71%)