

TS Register No: 267/2019-2020

AS Register No:290/2019-2020

Construction of 13 nos Groyne field at Pathiyankara in between chainage 60.100 to 61.600 KM at Thrikkunnappuzha in Harippad constituency in Alappuzha district.

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-Construction of Groyne Field									
1	od45844/2019_2020 Dismantling stones in the sea wall to construct the Groyne portion and Dumping in position suitably to form the armour course of sea wall as per approved design(dumping with a lead upto 50m)using rail track or pneumatic type equipment with crane or winches or by any other method								
	dismantling	1	1210.900				1210.900		
	Total Quantity							1210.900 cum	
	Total Deducted Quantity							0.000 cum	
	Net Total Quantity							1210.900 cum	
	Say 1210.900 cum @ Rs 598.38 / cum							Rs 724578.34	
2	od44228/2019_2020 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means /with Dozer including cutting and pushing the earth to site of embankment upto a distance of 100 metres (average lead 50 metres), including trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections. All kinds of soil All kinds of soil								
	Earth Cutting as per level calculation	1	4154.280				4154.280		
	Total Quantity							4154.280 cum	
	Total Deducted Quantity							0.000 cum	
	Net Total Quantity							4154.280 cum	
	Say 4154.280 cum @ Rs 152.48 / cum							Rs 633444.61	
3	60.59.3 A.S. E - Groynes works- Alappuzha - Supplying and laying Filter layer 30cm thick at site of work using 1 kg to 10 kg blasted granite stones per approved design including supply of stones , loading from quarry , conveying to site in tipper , weighing on departmental Weigh Bridge for measurement , unloading , dumping at site to lines and levels , rehandling stones for forming the section with the help of tippers and suitable crane and packing of stones if necessary including hire and operational charges of all tools and plants and all sundry expenses , providing and maintaining the runway for movement of vehicles, crane using spalls gravel or sand etc. complete as per the direction of departmental officers at site.								
	Overall Quantity	1	17440.000				17440.000		
	Total Quantity							17440.000 tonne	

		Total Deducted Quantity				0.000 tonne	
		Net Total Quantity				17440.000 tonne	
		Say 17440.000 tonne @ Rs 758.01 / tonne				Rs 13219694.40	
4	<p>od44229/2019_2020</p> <p>A.S.E - Groynes works- Alleppy-Supplying and Laying toe mound layer and core layer using 100 kg to 200kg blasted granite stones of specific gravity not less than 2.65 as per approved design , including supply of stones, loading from quarry to tipper by crane and conveying to site, weighing on departmental weigh bridge for measurement , unloading and dumping and packing in position at site to lines and levels to form the armoury layer over the csecondary layer already laid, with heavier stones on top layer, by re-handling stones, packing for forming the section with the help of crane, floating arrangement if necessary, including hire and operational charges of all tools and plants , wages of divers and all sundry expenses , providing and maintaining the top surface of runway for the movement of vehicles, crane using spalls gravel or sand etc complete as per the direction of departmental officers at site</p>						
	Toe mount layer	1	32263.000			32263.000	
	Core layer	1	23073.000			23073.000	
		Total Quantity				55336.000 tonne	
		Total Deducted Quantity				0.000 tonne	
		Net Total Quantity				55336.000 tonne	
		Say 55336.000 tonne @ Rs 839.85 / tonne				Rs 46473939.60	
5	<p>od44230/2019_2020</p> <p>A.S.E - Groynes works- Alleppy-Supplying and Laying under layer using 300 kg to 500kg blasted granite stones of specific gravity not less than 2.65 as per approved design , including supply of stones, loading from quarry to tipper by crane and conveying to site, weighing on departmental weigh bridge for measurement , unloading and dumping and packing in position at site to lines and levels to form the armoury layer over the csecondary layer already laid, with heavier stones on top layer, by re-handling stones, packing for forming the section with the help of crane, floating arrangement if necessary, including hire and operational charges of all tools and plants , wages of divers and all sundry expenses , providing and maintaining the top surface of runway for the movement of vehicles, crane using spalls gravel or sand etc complete as per the direction of departmental officers at site</p>						
	Overall Quantity	1	1770.000			1770.000	
		Total Quantity				1770.000 tonne	
		Total Deducted Quantity				0.000 tonne	
		Net Total Quantity				1770.000 tonne	
		Say 1770.000 tonne @ Rs 957.35 / tonne				Rs 1694509.50	
6	<p>od49799/2019_2020</p> <p>Moulding and supplying 0.8 cum(2T) tetrapod with graded aggregate of 40% 75mm to 40mm, 30% 40mm to 20mm and 30% 20mm to 6mm using 380kg cement/ m3 of concrete designed for M30 grade concrete (specific gravity of fine aggregate and coarse aggregate should not be less than 2.73 and 2.5 respectively) and the cement shall be 43 grade or higher) minimum cube strength requirement (i) @7 day - 20 N/mm2 (ii) @ 28 day - 30 N/mm2 and minimum density of concrete 2.5 g/cc including hire and</p>						

	operational charges of tools and plants, mould, curing, rehandling and stacking charges etc., complete as per the instruction of departmental officers at site .							
		1	8930.000				8930.000	
	Total Quantity						8930.000 each	
	Total Deducted Quantity						0.000 each	
	Net Total Quantity						8930.000 each	
	Say 8930.000 each @ Rs 7643.04 / each						Rs 68252347.20	
7	65.104 Conveying 0.8cum (2T) tetrapod from stacking yard and placing in position in two layers according to specification and forming the armour layer of breakwater to lines and levels over the secondary armour layer including hire and operational charges of tools and plants etc., complete as per the direction of the departmental officers at site							
		1	8930.000				8930.000	
	Total Quantity						8930.000 each	
	Total Deducted Quantity						0.000 each	
	Net Total Quantity						8930.000 each	
	Say 8930.000 each @ Rs 880.45 / each						Rs 7862418.50	
8	od49800/2019_2020 Moulding and supplying cement concrete 2m3 (5T) tetrapod with graded aggregate of 40% 75mm to 40 mm, 30% 40 to 20mm, 30% 20 to 5mm using 380 kg cement /m3 of concrete designed for M30 grade concrete (specific gravity of fine aggregate and course aggregates should not be less than 2.73 and 2.5 respectively) and the cement shall be 43 grade or higher) minimum cube strength requirement (i) @ 7 day - 20N/mm2 (ii) @ 28 day - 30N/mm2 and minimum density of concrete 2.5 g/cc. including hire and operational charge of tools and plants moulding and rehandling and stacking charge etc complete according to specification and instructions of Engineer							
		1	1199.000				1199.000	
	Total Quantity						1199.000 each	
	Total Deducted Quantity						0.000 each	
	Net Total Quantity						1199.000 each	
	Say 1199.000 each @ Rs 19038.56 / each						Rs 22827233.44	
9	65.115 Conveying 2 m3 (5T) tetrapods from stacking and placing in two layer according to specification and forming the armour layer of break water to lines and levels at depth of water 8m and above including hire and operational charges of tools and plants etc complete							
		1	1199.000				1199.000	
	Total Quantity						1199.000 each	
	Total Deducted Quantity						0.000 each	

		Net Total Quantity					1199.000 each	
		Say 1199.000 each @ Rs 1805.77 / each					Rs 2165118.23	
10	od44791/2019_2020 Supplying of Mechanically Bonded, Needle Punched Polypropylene Non-Woven geotextile Mat as filter/seperation media below sea wall as per MoRTH 700 Type-I Geotextile suitable for harsh installation with elongation at failure <50%.The width of geotextile roll shall not be less than 4.5 m, at all locations with all leads and lifts, manpower and machinery, materials, labour etc. complete and as directed by Engineer - In - Charge.							
		1	43835.000				43835.000	
		Total Quantity					43835.000 sqm	
		Total Deducted Quantity					0.000 sqm	
		Net Total Quantity					43835.000 sqm	
		Say 43835.000 sqm @ Rs 160.62 / sqm					Rs 7040777.70	
SI No	Description	No	L	B	D	CF	Quantity	Remark
2 Installation of four numbers of weigh bridges including PCs near the site for weighing and documenting the weight of stones including the rent payable.								
Lump-Sum Total						Rs 2350000.00		
Provision for GST payments (in %) @						0.0%		
Amount reserved for GST payments						0.00		
Other Engineering Organisations Total						173244062.00		
Lumpsum for round off						55938.00		
						TOTAL Rs 173300000.00		
						Rounded Total Rs 17,33,00,000		
Rupees Seventeen Crore Thirty Three Lakh Only								

(Cost Index Applied for this estimate is 48.71%)