

TS Register No: 268/2019-2020

AS Register No:291/2019-2020

**CONSTRUCTION OF GROUYNE FIELDS AT KATTOOR FROM CHAINAGE.
168.465KM TO CH 171.627KM (OLD CH 96.643KM TO CH 99.535 KM) IN**

ALAPPUZHA

Detailed Estimate

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

Sl No	Description	No	L	B	D	CF	Quantity	Remark
1 Appendix A-Construction of Groyne Filed								
1	od45838/2019_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	1946.080				1946.080	
	Total Quantity						1946.080 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						1946.080 cum	
	Say 1946.080 cum @ Rs 598.38 / cum						Rs 1164495.35	
2	od44388/2019_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	42121.866				42121.866	
	Total Quantity						42121.866 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						42121.866 cum	
	Say 42121.866 cum @ Rs 152.48 / cum						Rs 6422742.13	
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	40413.000				40413.000	
	Total Quantity						40413.000 tonne	

	Total Deducted Quantity						0.000 tonne
	Net Total Quantity						40413.000 tonne
	Say 40413.000 tonne @ Rs 758.01 / tonne						Rs 30633458.13
4	od44389/2019_2020 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						
	Toe mount layer	1	73414.000				73414.000
	Core layer	1	55505.000				55505.000
	Total Quantity						128919.000 tonne
	Total Deducted Quantity						0.000 tonne
	Net Total Quantity						128919.000 tonne
	Say 128919.000 tonne @ Rs 839.85 / tonne						Rs 108272622.15
5	od44390/2019_2020 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						
	Overall Quantity	1	4678.000				4678.000
	Total Quantity						4678.000 tonne
	Total Deducted Quantity						0.000 tonne
	Net Total Quantity						4678.000 tonne
	Say 4678.000 tonne @ Rs 957.35 / tonne						Rs 4478483.30
6	od49792/2019_2020 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/mm ² (ii) @ 28 day - 30 N/mm ² and minimum density of concrete 2.5 g/cc including hire and operational charges of tools and plants, mould, curing, rehandling and stacking charges etc., complete as per the instruction of departmental officers at site .						
	1	21562.000				21562.000	
	Total Quantity					21562.000 each	
	Total Deducted Quantity					0.000 each	
	Net Total Quantity					21562.000 each	
	Say 21562.000 each @ Rs 7643.04 / each					Rs 164799228.48	
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	21562.000				21562.000	
	Total Quantity					21562.000 each	
	Total Deducted Quantity					0.000 each	
	Net Total Quantity					21562.000 each	
	Say 21562.000 each @ Rs 880.45 / each					Rs 18984262.90	
8	od49794/2019_2020 Moulding and supplying cement concrete 2m ³ (5T) tetrapod with graded aggregate of 40% 75mm to 40 mm, 30% 40 to 20mm, 30% 20 to 5mm using 380 kg cement /m ³ 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/mm ² (ii) @ 28 day - 30N/mm ² 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	3144.000				3144.000	
	Total Quantity					3144.000 each	
	Total Deducted Quantity					0.000 each	
	Net Total Quantity					3144.000 each	
	Say 3144.000 each @ Rs 19038.56 / each					Rs 59857232.64	
9	65.115 Conveying 2 m ³ (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	3144.000				3144.000	
	Total Quantity					3144.000 each	

							Total Deducted Quantity	0.000 each
							Net Total Quantity	3144.000 each
							Say 3144.000 each @ Rs 1805.77 / each	Rs 5677340.88
10	od44784/2019_2020 Supplying of Mechanically Bonded, Needle Punched Polypropylene Non-Woven geotextile Mat as filter/separation media below sea wall as per MoRTH 700 Type-I Geotextile suitable for harsg 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	112083.00				112083.00	
			0				0	
							Total Quantity	112083.000 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	112083.000 sqm
							Say 112083.000 sqm @ Rs 160.62 / sqm	Rs 18002771.46
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 4650000.00	
Provision for GST payments (in %) @							0.0%	
Amount reserved for GST payments							0.00	
Total							422942637.00	
Lumpsum for round off							57363.00	
							TOTAL Rs 423000000.00	
							Rounded Total Rs 42,30,00,000	
							Rupees Forty Two Crore Thirty Lakh Only	

(Cost Index Applied for this estimate is 48.71%)