

**KERALA CRICKET ASSOCIATION**

**Development of Land for the Construction of Cricket Ground at Ezhukone, Kollam**

**Tender Schedule**

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
			<b>APPENDIX A : SITE CLEARING</b>				
1	39758	m2	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.		/m2		
2	39758	m2	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.		/m2		
3	52	Each	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 30 cm girth upto and including 60 cm girth		/Each		
4	26	Each	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 60 cm girth upto and including 120 cm girth		/Each		
5	11	Each	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 120 cm girth upto and including 240 cm girth		/Each		
6	52	Each	Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 300 mm to 600 mm		/Each		

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7	26	Each	Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 600 mm to 900 mm		/Each		
8	11	Each	Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth above 1800 mm		/Each		
			<b>APPENDIX B :DEMOLISHING WORKS</b>				
9	5.15	m3	Demolishing R.C.C. work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material with in 50 metres lead as per direction of Engineer -in-Charge.		/m3		
10	10.30	m3	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar				
			<b>APPENDIX C : EXCAVATION/CUTTING/FILLING/GROUND FORMATION</b>				
11	3660.00	m3	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge: All kinds of soil ( <i>As per Griha criteria surface soil to be removed backfilled safely to a depth of 20cm</i> )				
12	95024.00	m3	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 getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge: all kinds of soil ( <i>Areas except griha criteria for ground</i> )				
13	89625.00	m3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
14	3760.00	m3	Carriage of materials- By Mechanical Transport including loading,unloading and stacking- Earth				
15	2650.00	m3	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 getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge: ordinary rock				
16	2650.00	m3	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 getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge: Hard rock not requiring blasting				
17	150.00	m3	<b>Pre-splitting of Rock Excavation Slopes</b> -Carrying out excavation in hard rock to achieve a specified slope of the rock face by controlled use of explosives and blasting accessories in properly aligned and spaced drill holes, collection of the excavated rock by a 80 HP dozer, loading in tipper by a front end loader and disposing of the material with all lifts and lead upto 1000 m, all as specified in clause No. 303				
18	50.00	m3	Wedging, barring, picking, chiselling, benching etc. of hard rock wherever necessary including conveying and depositing the spoil in the designated areas within 50m including all lead and liftetc. Complete as directed by the engineer				
			<b>APPENDIX D : ROAD WORK</b>				
19	2729.50	m3	Excavation for roadway in soil using manual means including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto1000 metres.				
20	103.00	m3	Excavation for roadway in hard rock (blasting prohibited) with rock breakers including breaking rock, loading in tippers and disposal within all lifts and lead upto 1000 metres, trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections.Mechanised				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
21	2729.50	m3	Banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m All kinds of soil				
22	927.00	m3	Construction of granular sub-base by providing graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 Grading-I - Plant Mix Method				
23	679.80	m3	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.				
24	4506.25	m2	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 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand 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.60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.				
			<b>APPENDIX E : RCC RETAINING WALL AND SIDE DRAIN</b>				
25	1158.75	m3	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 upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All Kind of soil.				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
26	175.10	m3	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 (zone-III) : 8 graded stone aggregate 40 mm nominal size)				
27	2137.25	m2	Centering and shuttering including strutting, propping etc. and removal of form work for Foundations, footings, bases for columns				
28	3206.39	m2	Centering and shuttering including strutting, propping etc. and removal of form work of Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.				
29	1066.05	m3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing: 1:1½:3 (1 cement : 1½ coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size)				
30	160165.00	kg	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				
31	1133.00	m3	Filling with available fly ash and earth (excluding rock) in trenches or embankment in layers (each layer should not exceed 15 cm), with intermediate layer of compacted earth (Soil density of 98%) after ever four layers of compacted depth of fly ash, sides & top layer of filling shall be done with earth having total minimum compacted thickness 30 cm or as decided by Engineer -in-charge, including compacting each layer by rolling/ ramming and watering, all complete as per drawing and direction of Engineer -in - charge				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
32	463.50	m3	Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2. of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and Technical Specification.				
33	20.60	m	Providing and fixing of expansion joint system related with wall joint (internal/external) location as per drawings and direction of Engineer-In- Charge. The joints shall be of extruded aluminum base members, self aligning / centering arrangement and support plates as per ASTM B221- 02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminum profiles exhibiting minimal exposed aluminum surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063). Wall Joint of 200 mm gap				
34	772.50	m	PVC WEEP HOLES- Providing weep holes using 75mm dia. PVC pipes working pressure 4kg /sq.cm including cost of materials, conveyance, labour charges etc. complete.				
35	412.00	m	PVC WEEP HOLES- Providing weep holes using 100mm dia. PVC pipes working pressure 4kg /sq.cm including cost of materials, conveyance, labour charges etc. complete.				
36	1545.00	m	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete On concrete work				
			<b>APPENDIX F : RANDOM RUBBLE RETAINING WALL</b>				
37	150.00	m3	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 upto 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				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
38	45.00	m3	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 (zone-III) : 8 graded stone aggregate 40 mm nominal size)				
39	60.00	m2	Centering and shuttering including strutting, propping etc. and removal of form work for : Foundations, footings, bases for columns				
40	125.00	m3	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with Cement mortar 1:6 (1 cement : 6 coarse sand)				
41	120.00	m3	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) at window sills, ceiling level and the like.Cement mortar 1:6 (1 cement : 6 coarse sand)				
42	45.00	m2	Centering and shuttering including strutting, propping etc. and removal of form work for :Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.				
43	10.00	m3	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size)				
44	155500.00	kg	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				
45	225.00	m	PVC WEEP HOLES- Providing weep holes using 100mm dia. PVC pipes working pressure 4kg /sq.cm including cost of materials, conveyance, labour charges etc. complete.				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
			<b>APPENDIX G : RCC CULVERT</b>				
46	30.00	m3	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 upto 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				
47	20.00	m3	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 (zone-III) : 8 graded stone aggregate 40 mm nominal size)				
48	50.00	m2	Centering and shuttering including strutting, propping etc. and removal of form work for : Foundations, footings, bases for columns				
49	120.00	m2	Centering and shuttering including strutting, propping etc. and removal of form work for :Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.				
50	40.00	m3	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size)				
51	6050.00	kg	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				
52	15.00	m2	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.On concrete work				



Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
			<b>APPENDIX H : RETAINING WALL WITH GEOGRID AND INTERLOCKING CEMENT BLOCKS</b>				
53	19100.00	m2	Assembling, joining and laying of reinforcing elements. of synthetic geogrids for Reinforced Earth Structures				
54	2500.00	m2	Assembling, joining and laying of reinforcing facing elements of RCC for Reinforced Earth Structures. [NOTE :The cost of reinforced earth retaining wall shall include following:(I) Excavation for foundation including backfilling.(ii) Foundation concrete as per approved design.(iii) Cost of facial pannels and their erection .(iv) Cost of reinforcing elements including their fixing and joining with the facial pannels.(v) Drainage arrangement including filter media as per approved design and drawings]				
55	5550.00	m3	Banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m All kinds of soil				
56	1700.00	m3	Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2. of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and Technical Specification.				

Sl No	Qty	Unit	Item Description	Rate (in Figures)	Unit	Rate (in Words)	Amount
			<b>APPENDIX I : SLOPE PROTECTION WORK WITH GEO-TEXTILE MAT</b>				
57	900.00	m2	Supply and layinfg with geotextiles having GSM 740 including cost of all materials and labour charges for laying and fixing in position properly as per the direction of Engineer in charge				
			<b>Total</b>				
			<b>GST</b>				
			<b>Total (Incl of GST)</b>				

Rupees in Words:

**Sign & Seal of Contractor**

**Place :**

**Name & Address:**

**Date:**