

**KERALA CRICKET ASSOCIATION**

**Supply and Installation of IP based CCTV Camera and Allied Electrical Works at Conor Vayal Cricket Stadium Thalassery,Kannur**

**TENDER SCHEDULE**

<b>Item No</b>	<b>Qty</b>	<b>Unit</b>	<b>Details of work</b>	<b>Rate in figures</b>	<b>Unit</b>	<b>Rate in words</b>	<b>Amount</b>
			<b>IP CAMERA WORKS</b>				
1	5	<b>each</b>	Supply and Installation of 4MP Fixed Starlight IR Bullet Camera ,Focus : 4mm , Smart IR Range: Up to 50M , Built-in Mic,SD Card Slot,Reset Button , 120dB WDR , H.265+/H.265/H.264 , Up to 2592x1520@25fps , Image Sensor 1/2.8" CMOS , Signal System PAL/NTSC , Min. Illumination Color: 0.002Lux@ (F1.6, ACG ON), B/W: 0Lux with IR , Shutter Time : 1s to 1/100,000s , Day & Night: Dual IR Cut Filter with Auto Switch , Aperture F1.6, Fixed , Wavelength 850nm , Video Bit Rate : 32Kbps~6Mbps , Audio Compression G.711/G.711U/ADPCM , Audio Bit Rate 8K~48Kbps , Main Stream PAL: 25fps (2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720) NTSC: 25fps (2592x1520, 2560x1440), 30fps (2304x1296, 1920x1080, 1280x720) , Sub Stream PAL: 25fps (704x576, 704x288, 640x360, 352x288) NTSC: 30fps (704x480, 704x240, 640x360, 352x240) , Image Enhancement: BLC/3D DNR/HLC , OSD : 16x16, 32x32, 48x48, 64x64, adaptable size, Letters Such as Week, Date, Time, Total 3 Regions , Privacy Mask 4 regions , Smart Defog , Alarm Trigger : Motion Detection, Mask Alarm, IP Address Conflict , Video Analytics : Tripwire, Perimeter , ANR : Auto store video in SD card when NVR disconnected, and upload video to NVR when resumed connection , Protocols : TCP/IP, HTTP, FTP, DHCP, DNS, DDNS, MULTICAST, IPV4, NTP, UDP, Telnet , ONVIF (PROFILE S/T/G) , Communication Interface : 1 RJ45 10M/ 100M self adaptive Ethernet port , Audio I/O : Mic in , Reset Button , Built-in MicroSD card slot, up to 512 GB , Protection : IP67, Lightning protection, surge protection and voltage transient protection , Power Consumption MAX: 6W (12V) MAX: 7W (PoE) , Power Supply DC 12V±25%, PoE (802.3af) ; Preferred Make : Honeywell / Pelco / Axis / Bosch		/each		

**TENDER SCHEDULE**

Item No	Qty	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
2	4	each	<p>Supply and Installation of 4MP Fixed Dome Camera ,Focus : 4mm , Smart IR Range: Up to 50M , Built-in Mic,SD Card Slot,Reset Button , 120dB WDR , H.265+/H.265/H.264 , Up to 2592x1520@25fps , Image Sensor 1/2.8" CMOS , Signal System PAL/NTSC , Min. Illumination Color: 0.002Lux@ (F1.6, ACG ON), B/W: 0Lux with IR , Shutter Time : 1s to 1/100,000s , Day &amp; Night: Dual IR Cut Filter with Auto Switch , Aperture F1.6, Fixed , Wavelength 850nm , Video Bit Rate : 32Kbps~6Mbps , Audio Compression G.711/G.711U/ADPCM , Audio Bit Rate 8K~48Kbps , Main Stream PAL: 25fps (2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720) NTSC: 25fps (2592x1520, 2560x1440), 30fps (2304x1296, 1920x1080, 1280x720) , Sub Stream PAL: 25fps (704x576, 704x288, 640x360, 352x288) NTSC: 30fps (704x480, 704x240, 640x360, 352x240) , Image Enhancement: BLC/3D DNR/HLC , OSD : 16x16, 32x32, 48x48, 64x64, adaptable size, Letters Such as Week, Date, Time, Total 3 Regions , Privacy Mask 4 regions , Smart Defog , Alarm Trigger : Motion Detection, Mask Alarm, IP Address Conflict , Video Analytics : Tripwire, Perimeter , ANR : Auto store video in SD card when NVR disconnected, and upload video to NVR when resumed connection , Protocols : TCP/IP, HTTP, FTP, DHCP, DNS, DDNS, MULTICAST, IPV4, NTP, UDP, Telnet , ONVIF (PROFILE S/T/G) , Communication Interface : 1 RJ45 10M/ 100M self adaptive Ethernet port , Audio I/O : Mic in , Reset Button , Built-in MicroSD card slot, up to 512 GB , Protection : IP67, Lightning protection, surge protection and voltage transient protection , Power Consumption MAX: 6W (12V) MAX: 7W (PoE) , Power Supply DC 12V±25%, PoE (802.3af) ; Preferred Make : Honeywell / Pelco / Axis / Bosch</p>		/each		
3	1	each	<p>Supply and installation of project series Network Video Recorder, support 32 Channel, Should support Resolution:- greater than equal to 12 MP IP Camera, Network Bandwidth incoming 640 Mbps and outgoing 640 Mbps for access, support for H.265+/H.265/H.264 encoding format streaming access and decoding output, Recording play back quality: 16 ch play back simultaneously, Recording resolution up to 12MP, Recording mode: support manual, Auto, Motion detection, Alarm, trigger record mode, Operation way: Mouse, local Login: Username and password, Recording storage: Local HDD, network, Video output: HDMI/VGA/TV, Support min. 8 SATA HDDs , Each port supports min. 18TB HDD(Enterprise class),support-RAID0, RAID1, RAID5, RAID6, RAID10,Support dual Gigabit Ethernet ports,Supports 4 HDMI outputs with a maximum of 4K HD output,Alarm Input/out:16 in /4 out ,Audio:1 in / 1 out ,Supports intelligent analySupports intelligent analytics such as facial detection, Pedestrian Detection,human detection, vehicle detection,Licence plate recognition,perimeter intrusion, and line crossing statistics ,product must comply with NDAA compliance,Non Black Listed Declaration ,ISO 900:2015 , Onvif Membership Declaration , Own Mac Address Declaration, Certification: BIS,CE,FCC,ROHS , Replacement/Repair warranty for 24 months or morePreferred make: Honeywell/ Bosch/ Axis/Pelco.</p>		/each		

**TENDER SCHEDULE**

<b>Item No</b>	<b>Qty</b>	<b>Unit</b>	<b>Details of work</b>	<b>Rate in figures</b>	<b>Unit</b>	<b>Rate in words</b>	<b>Amount</b>
4	1.00	each	Supply and installation of 8 TB surveillance HDD - &lt;br&gt;Capacity up to 8TB , Support for up to 32 cameras per drive , AllFrame TM technology ,Up to 16 AI channels for Deep Learning analytics on AI-enabled NVRs &bull; MTBF of up to 1.5 million hours &bull; 3-year limited warranty , INTERFACE SATA 6 Gb/s FORM FACTOR 3.5-inch , PERFORMANCE CLASS 7200 RPM Class , Advanced format (AF) , RoHS compliant&#8310; , Cameras supported Up to 64 , Drive bays supported 16+ , AI streams 32, Tarnish, resistant components , Interface transfer rate (max)&#8309;&lt;br&gt;Approved Makes- Seagate/WD/SkyHawk		/each		
5	2	each	Supply and fixing of 6U Wall Mount Rack with all accessories.&lt;br&gt;Racks should be manufactured out of steel sheet punched, formed, welded and powder coated. Rack should have 100% assured compatibility with all equipment&rsquo;s conforming to DIN 41494 (General Industrial Standard for equipment&rsquo;s) or Equivalent EIA /ISO / EN Standard. Rack should have 2 No Adjustable, 19&rdquo; verticals with Punched alternating hole pattern offering greater mounting flexibility and maximizes usable mounting space having power plug of 3 nos 16A socket Approved Makes- NETRACK or Equivalent		/each		
6	2.00	each	Supply and installation of 12 Port POE switch&lt;br&gt;12-Port 10/100/1000 Base-T auto-sensing PoE+ ports, 4 dedicated 100/1000 380W Base-X Fiber SFP ports,Bandwidth: 56 Gbps non-blocking, Acoustic noise (ANSI-S10.12): 33.42 dBA, Mean Time Between Failures (MTBF): 1,071,896 hours, Heat Dissipation (at AC 97VAC/47Hz and full PoE load): 1501.3 Btu/H (internal PS), Forwarding modes: Store-and-forward, 4 Priority queues, Priority queuing: Weighted Round Robin (WRR), MAC Address database size: 16,000 media access control (MAC) addresses, VLAN: 256, (MAF Required) &lt;br&gt;Approved Makes- NETGEAR/Juniper/ Allied Telesis (MAF Required)&lt;br&gt;		/each		
7	2.00	each	Supply and installation of OFC Module/Media convertor &lt;br&gt;Features Dual data-rate of 1.25Gbps/1.063Gbps operation 1550nm DFB laser and PIN photo detector for 40km transmission Compliant with SFP MSA and SFF-8472 with single LC receptacle Digital Diagnostic Monitoring: Internal Calibration or External Calibration Compatible with SONET OC-24-LR-1 Compatible with RoHS Refer Annexure 1 for detailed specification.&lt;br&gt;Approved Makes- NETGEAR/Juniper/ Allied Telesis (MAF Required)&lt;br&gt;		/each		
8	2.00	each	Supply and installation of SFP pluggable optical transceiver module which is widely used for both telecommunication and data communications applications with 5 year warranty. Its SFP port accepts both optical modules and copper cables with all accessories.		/each		
9	9.00	each	Supply and installation of Single shutter faceplate&lt;br&gt;Single shutter faceplate with SMB Box in recess/on surface and making good the damages, colour washing etc as requiredType : British Style Standard Face Plate , Dimensions : 86 mm X 86 mm , Material : VE10ABS , Compatible For UTP &amp; STP , Labelling Facility( Data voice, Fax, Video) , ROHS Compliant &lt;br&gt;Approved Makes- Commscope or Equivalent		/each		
10	450	meter	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 25mm		/meter		

**TENDER SCHEDULE**

<b>Item No</b>	<b>Qty</b>	<b>Unit</b>	<b>Details of work</b>	<b>Rate in figures</b>	<b>Unit</b>	<b>Rate in words</b>	<b>Amount</b>
11	4	each	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 A switch		/each		
12	8	each	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 A socket outlet		/each		
13	4	each	Supplying and fixing following 8 module box suitable for switch/ socket on the existing modular plate & switch box including cover plate connections but excluding modular plate etc. as required.8 module		/each		
14	150	Meter	Supply and laying of Outdoor CAT 6 UTP OSP Cable&lt;br&gt;A HDPE compound insulates the cores with anIEC 60332-1 complied LS0H inner jacket and UV resistant heavy duty FR PVC Black outer sheath. The rugged construction of this cable makes it ideal for outdoor installations, Category 6 compliant n LS0H inner sheath and FR PVC outer n UV resistant n Suitable for outdoor Installations. ANSI/TIA/EIA-568-C.2, ISO/IEC 11801, IEC 6074-1(Toxicity), IEC 6074-2 (Acid Gas) standards&lt;br&gt;Approved Makes-Molex,Commscope or Equivalent		/Meter		
15	350	meter	Supply and laying of 12 Core &ndash; 9/125 Micron Single Mode Outdoor Fiber Cable OS2&lt;br&gt;Type of Cable : OS2 Single mode , Optical Properties Attenuation at 1310 nm &le; 0.34 dB/KM at 1550nm &le; 0.22 dB/KM , Maximum Tensile Strength Short term : 1000N , Maximum Crush resistance Short term : 2000N/10CM , Operating Temperature : - 10&deg;C to + 70&deg;C , Sheath : UV Stabilized HDPE , Over all CableDiameter : 9.5 mm- 10 mm , Fiber Tube Identification : Single Tube , No. Of Elements : 1, Fiber Protection(Tubes) : Polybutyleneterephthalate(PBT), PeripheralStrengthMember : TwoSteelWires , Mass(Nominal) : 95 Kg/Km , CoreWrapping : PolyethyleneTerephthalate , InnerSheath : Polyethylene , Armouring : Copolymer Steel tape Armor , Sheath : HD Polyethylene (UV Stabilized) , Water Blocking : Thixotropic Gel , ROHS Complaint, ISO/IEC 11801 : 2002 -2nd Edition, Type OS1, ITU-T REC G 652D spec for Low Water Peak fiber, TIA 568, EIA 455, AS/ACIF S008; AS/NZS 3080 , Max. Bending Radius (during installation) : 20D , Max. Bending Radius (during full load) : 10D , Life of Cable: The minimum expected life of the cable is not less than 25 years.&lt;br&gt;Approved Makes-Molex,Commscope or Equivalent		/meter		
			<b>REARRANGEMENT WORKS AT OFFICE AREA</b>		/		
16	1	each	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 16 way, Double door		/each		

**TENDER SCHEDULE**

<b>Item No</b>	<b>Qty</b>	<b>Unit</b>	<b>Details of work</b>	<b>Rate in figures</b>	<b>Unit</b>	<b>Rate in words</b>	<b>Amount</b>
17	1	each	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps		/each		
18	1	each	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.25 amps		/each		
19	10	each	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Single pole		/each		
20	1	job	Re arrangement in the exiting DB/street lights and dismantling the damaged switch as per the direction of engineer incharge		/job		
21	8	sqm	Supply and providing 3mm SMC sheet as shrouding for bus interconnection / terminations etc. including required nut & bolt etc.		/sqm		
22	15	kg	Supply and fabrication conveyance and installation of angle iron frame work for wall mounting panel board		/kg		
23	55	meter	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 32mm		/meter		
			<b>REROUTING OF ELECTRICAL CABLES FOR STREET LIGHT</b>		/		
24	250	meter	Supply & laying of one number PVC insulated and PVC sheathed armoured copper power cable of 1.1KV grade of the following sizes in the existing RCC/ HUME / STONE WARE/ GI/ DWC pipe as required. 3 core 4 sq mm		/meter		
25	140	Meter	Supplying and drawn of UTP 4 pair CAT 6 LAN cable in the existing surface/recessed steel/PVC conduit as required1 run of Cable		/Meter		
26	50	meter	Supplying, laying and jointing of the following sizes of double wall corrugated (DWC) pipes made out of HDPE conforming to IS 14930 Part II for mechanical protection to underground power cables with all required accessories in ground in the existing trench 50/38 mm or nearest size		/meter		
27	450	meter	Supply & laying of one number PVC insulated and PVC sheathed armoured copper power cable of 1.1KV grade of the following sizes in the existing RCC/ HUME / STONE WARE/ GI/ DWC pipe as required. 2 core 4 sq mm		/meter		

**TENDER SCHEDULE**

<b>Item No</b>	<b>Qty</b>	<b>Unit</b>	<b>Details of work</b>	<b>Rate in figures</b>	<b>Unit</b>	<b>Rate in words</b>	<b>Amount</b>
28	25	meter	Supplying and laying of following size PVC pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. in the existing trench, complete as required 50mm PVC		/meter		
29	8	each	Supply Conveyance, installation, testing and commissioning of 150W LED Flood light output greater than 105lumen/W 4000-6000 K with IP 66 protection LED Chip make Cree/Lumiled/Nichea with power factor greater than 0.95 at full load, internal surge protection up to 8 KV, and Aluminium pressure die-cast Powder coated housing, acrylic cover complete with THD less than 10%, power factor greater than 0.98, RoHS compliant, duly wired up for use on 230 V AC supply. Driver compartment should be separately accessible for maintenance (LM 79&80 certificates from NABL accredited Third party lab to be produced mentioning chip manufacturer)		/each		
30	8	each	Supplying and termination of the Join kit with IP67 box suitable for armoured cables with all accessories as required		/each		
31	1	each	Supply and Installation of the LED monitor with HDMI cable for interconnection CCTV camera		/each		
			<b>TOTAL</b>		Rs.		
			<b>Add GST @ 18 %</b>		Rs.		
			<b>Grand Total</b>		Rs.		
			<b>Rounded to</b>		Rs.		

Rupees in words :

**Signature of Contractor:**

**Name and address**