### CCTV Installation - Vengara Grama Punchayath, Malappuram

#### 1. Scope of Work

Supply and installation of CCTV cameras

Networking setup (wiring and connectivity). Should Partner with a local network provider for connectivity and static ip.

#### 2. Maintenance

2 years warranty

AMC (Annual Maintenance Contract) to be provided as instructed by the Grama Panchayat after the warranty period

#### 3. Number of Cameras & Locations

Cameras to be installed at waste dumping spots, bus stand, and other public places.

Number of cameras will depend on per-unit price

#### 4. Technical Requirements

Camera quality: 1080p (Full HD)

Features: Night vision and water resistant

technical specifications: As per the sample specification provided by Suchithwa Mission (attached)

#### 5. Monitoring Setup

Live monitoring display to be arranged at the Panchayat office only.



**Standard Specifications & Guidlines** 





## **Components and Specifications**







Installation of Pole (6 Meters), 3-inch diameter, Galvanised for Camera installations & aerial cabling as required (height of pole/ camera installation may vary based on site conditions). Ground fixing with M20 concrete as per standard specifications. Required clamps/ couplers/ bends/ tees/ saddles/ clamps and flexible pipes, splicing and connection, earthing shall be provided. Required passive components, Suitable power supply and Power back shall be provided.





## Connectivity

Fiber Connectivity/ Custom connectivity as per site condition required for full video transfer with event/incident detection.

## 📴 Public IP (Static)

Public IP (Static) shall be available to establish communication between Command-and-control center and NVR.



## **NVR Storage**

- 1 to 4 HD Channels with 15 days video recording 3 4 TB Surveillance HDD
- 02 4 to 7 HD Channels with 15 days video recording - 5 TB Surveillance HDD
- 03 8 to 11 HD Channels with 15 days video recording - 8 TB Surveillance HDD
- 12 to 16 HD Channels with 15 days video recording 12 TB Surveillance HDD 04
- 05 17 to 22 HD Channels with 15 days video recording - 15 TB Surveillance HDD

## POE Switch

The POE switch establishes communication between devices and provides power for all connected POE devices.

| 02 4 to 7 HD Channels - 8 port POE switch, 140W                             |  |
|---|--|
|   |  |
| 8 to 11 HD Channels - 16 port POE switch or a minimum of 12 POE ports, 200W |  |
| 12 to 16 HD Channels - 16 or 24 port switch with minimum 16 POE ports, 200W |  |
| 17 to 22 HD Channel - 24 port POE switch, 400W                              |  |

# Computing Hardware

| 01 1 to 4 HD Channels -   | CPU Cores: 14, L2/L3 Cache: 24MB, CPU DD5 RAM: 16 GB GPU with CUDA Cores-2304, L1 Cache-64 KB (per SM), L2 Cache-4 MB, DDR6-8 GBOR |
|---------------------------|--|
| 02 5 to 7 HD Channels -   | CPU Cores: 14, L2/L3 Cache: 24MB, CPU DD5 RAM: 16 GB GPU with CUDA Cores-2944, L1 Cache-64 KB (per SM), L2 Cache-4 MB, DDR6-8 GB   |
| 03 8 to 11 HD Channels -  | CPU Cores: 14, L2/L3 Cache: 24MB, CPU DD5 RAM: 16 GB GPU with CUDA core- 3,584, L2/L3 Cache-3 MB, GPU DDR6 RAM: 12 GBOR            |
| 04 12 to 16 HD Channels - | CPU Cores: 16, L2/L3 Cache: 30MB, CPU DD5 RAM: 16/32 GB GPU with CUDA core: 5888, L2/L3 Cache:36 MB, GPU DDR6 RAM: 16 GBOR         |
| 05 17 to 22 HD Channels - | CPU Cores:24, L2/L3 Cache:36MB, CPU DD5 RAM:32/64GB GPU with CUDA core: 16384, L2/L3 Cache:72 MB, GPU DDR6 RAM: 24 GBOR            |



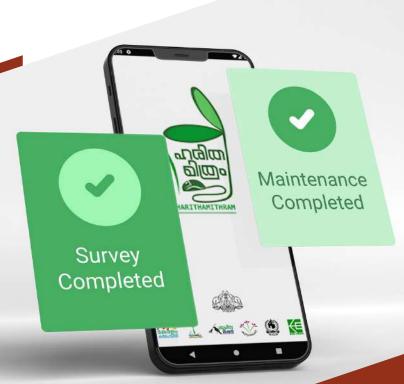
02

The location of the camera shall be geo tagged

01

Ensure that the camera and its associated hardware systems are in compliance with the specifications provided in the guidelines







A combination of the listed features shall be enabled by the Control and Command Center by analysing the feed from the camera installed across the state.



