SCOPE OF WORK OF CCTV SURVEILLANCE SYSTEM

OVERVIEW OF WORK
Scope of the work is to provide Turnkey Solution that includes but is not limited to installation only. It should cover Design, Supply, Installation, Implementation, Commissioning, Training, providing user manual, providing 36 months Warranty for the total solution including all hardware, software, materials, services and support etc. which should providing an Integrated Video Surveillance System for MGVCL. Work also includes all related work at controlling office at all the Locations. All necessary cabling / wiring / sockets and allied infrastructure conforming to respective quality / standard norms are also included in the scope of this job.

Bidder shall be responsible for the following scope of services and shall be the Single Point of responsibility for the end user/client officials for the entire period of 3 years of warranty.

SCOPE OF WORK FOR BIDDER
PART-I: Supply and Installation of the CCTV Surveillance System:

1. Supply, install, operate, maintain and provide warranty & related support services for hardware and upgrade/update/enhancement for system software, as detailed out in technical specifications, including related software, firmware etc. for a period of 3 years from the date of installation for all supplied items at MGVCL site including additional material/hardware/software /services as may be required to be supplied without any additional cost.

2. Any software and firmware upgrade / enhancement / engineering changes applicable to the hardware and software supplied should be provided for the warranty period within a period of one month from the date of release.

3. Providing detailed architecture diagram of Test & Development, Quality and Production environment setup for optimum performance, security, scalability and desired uptime requirement. Should include all other supporting material as per the requirement to ensure smooth implementation. In that context, it is a ‘turn - key’ assignment.

4. The System Integrator will need to provide a detailed implementation plan including the architecture diagram, strategy, approach, and delivery of materials, specific issues, and their resolutions. Detailed implementation and post - implementation processes and procedures

5. Bidder has to provide the services for configuring and installing the hardware , deploying and installing the system software as per the requirements (porting of the application)/testing /integration of various hardware and software, as may be needed at MGVCL Site without any additional cost for the period of 3 years from the date of installation for all supplied items

6. Bidder has to collaborate, coordinate and deploy manpower to ready the entire project setup. Bidder must build in the cost for the same, if any under implementation services.
7. Bidder should have a back-end / back-to-back support contract/agreement/arrangement for services including supply of spare parts, expertise requirements etc. with the Original Equipment Manufacturers (OEMs) of CCTV peripherals which includes the post-sales support activities to meet the Service Level Agreement (SLA) mentioned for the entire solution period. The OEM undertaking letter on OEM Letter Head in this regard should be submitted along with the bid.

8. Costs must include cost of delivery at designated locations of MGVCL, transit handling and insurance, custom duties etc as may be applicable. Taxes shall be shown separately as in financial bid and should include all applicable taxes as on date of bidding and shall be paid as per actual. Taxes not quoted shall not be paid to the Bidder.

9. Provide on-site warranty support as stated in Min. Technical Specifications Warranty Clause for all the supplied items.

10. Bidder has to ensure seamless integration of quoted Hardware & software product with applications and also has to provides the material/services which are not mentioned in min tech specification but required to complete the turnkey solutions without any additional cost invariably.

11. The installation must be done directly by OEM or directly by through their authorized partner/reseller/system integrator but the overall responsibility lies with OEM only. Note that all quoted products must be configured for 3 years Hardware and 3 years Software warranty taken from OEM by bidder.

12. Bidder has to submit the detailed BOM (Bill of Material) along with the internal part nos. for all quoted products inclusive of all licenses.

13. Bidder has to submit the OEM compliance letter showing line by line compliance with tender specification.

14. Bidder has to submit the full compliance of the tender terms & condition, scope of work and Service level agreement.

15. Bidder has to strictly adhere to Service Level Agreement

16. The server and storage products if used in virtualized environment for video management software necessary Installation / reinstallation of VMS, configuration and implementation support in future if required shall be provided by successful bidder.

**PART-II: Overview AND Ensuring Solution of CCTV Surveillance System**

1.2.1 The envisaged CCTV Integrated Video Surveillance system shall be IP based& ONVIF System with distributed architecture having control room at the local office of installed location & viewing facility at the local & corporate office MGVCL. Fixed Day and Night Surveillance Cameras shall be used at informed location. All the cameras should be capable to record all the activities even zero light.

1.2.2 The proposed Solution should allow MGVCL officials to locally and centrally monitor its facilities from a remote location on a personal computer/monitor/IPhone/IPad/Android. Any kind of configuration /setting done by bidder without any cost.
1.2.3 The Solution should capture, store, and analyze digital Video images with audio to enable central monitoring, increase operational efficiency, reduce liability, minimize risk and secure people & property.

1.2.4 The digital conversion should ensure secure and ready video access from virtually anywhere on network. Authorized personnel should be able to check the images of specific locations, people, and events, anytime and anywhere, without reviewing countless hours of video recordings.

1.2.5 The system should be provided with weather proof IP Fixed Camera, lens, housing & mountings to capture video with which, would be viewed & controlled through the Video Management Software, recorded and stored.

1.2.6 Supply, installation, testing & commissioning of Minimum 1 KVA UPS (Batteries provided with back up time of 30 Minutes system) for the entire CCTV system. UPS shall be located at Local Control room. From Panel Power source to UPS and UPS to all other CCTV equipment.

1.2.7 The NVR shall make continuous recording of all cameras for 24 hrs x 7 days with hardware should have adequate storage for a period of 60 days. System Integrator should provide the exact storage calculation. If necessary, additional storage in form of hard disk drive shall be provided by the Bidder. Bidder should provide Wireless mouse for each location for viewing & managing NVR.

1.2.8 Arranging tools, tackles, machinery, test instruments, consumables, skilled manpower etc. complete in all respects for installation, testing and commissioning of the system.

1.2.9 Preparation of Functional Design Specifications, Documents, Factory Acceptance Test Procedures, Site Acceptance Test & Final Acceptance Testing Procedures etc. and obtaining approval from the MGVCL.

1.2.10 On completion of the works and before issue of certificate of completion, the bidder shall provide inbuilt documents including manuals and operating instructions, software, software keys/passwords and training to MGVCL’s personnel in all aspects of system design, theory of operation of equipment, functional details, trouble shooting and familiarization with systems as per scope of work etc.

1.2.11 The intent of the specifications is to cover the turn key responsibility for (1) Site survey, selection of equipment and system engineering for design, supply, installation, integration and commissioning of CCTV based security surveillance system and various sub system required to complete the system in all respect (2) The equipment offered together with all services to be performed by the bidder as covered under the specifications of this work shall be fully in compliance with the requirements (3) The bidder shall furnish together with data requirements, complete bill of materials, drawings, technical data, information, technical literature for operation and maintenance and other details required to fully establish the capability and performance of the equipment offer.
1.2.12 The materials offered together with all services to be performed by the Bidder as covered under the specifications of this work shall be fully in Compliance with the requirements stated herein.

1.2.13 The Bidder shall be responsible for providing all materials, equipment, installation / maintenance tools and services, specified or otherwise, which are required to fulfill the intent of ensuring operation-ability/ maintainability and reliability of total materials covered under these specifications. The work and materials shall be in compliance with all applicable, statutory regulations and safety requirements applicable.

1.2.14 The interpretation of the MGVCL in respect of the scope, details and services to be performed by the Bidder shall be binding upon the Bidder.

1.2.15 Applications of the proposed System should include tracking movements/Verification and recognition, through high quality images, of persons and Objects including vehicles. The recordings of the scene of the Jurisdiction shall be helpful in case of enquiries etc. in establishing the truth. If required for any incident MGVCL has to rights to call vendor & Vendor has to provide event, time, day, Motion based etc. Recording to MGVCL official.

1.2.16 Software should be able to trigger & pop up Real Time videos on trigger of any Video Analytic Alarm. The software should be able to record for all the cameras with time stamping. If required centrally VMS software through remote location/subdivision camera recording at remote server should be installed by vendor as and when required without any cost. The VMS integration should be done by awarded bidder.

1.2.17 Drawings and Data Requirements to be submitted by the Bidder for the complete system like:
   Technical Architecture of Proposed System
   Complete Bill of Quantity (BOQ)
   Complete Data Sheet
   Complete Material Specification
   Video Management and Software specification
   Test Records and Commissioning Documents.
   Diagrams and Wiring connection
   Operation and Maintenance Manual
   As Built Drawings

The MGVCL and its representative shall have the right to inspect and test each equipments at all stages of production and commissioning of the system. The inspection and testing shall include but not be limited to raw materials, Components, sub-assemblies, prototypes, produced units, guaranteed Performance specifications, etc. For factory inspection and testing, bidder shall arrange all that is required e.g. quality assurance personnel, space, and test Gear etc. for successfully carrying out of the work by the MGVCL official at the Manufacturer’s work.

During Site Acceptance Tests the performance of each equipment and system as a whole shall be measured and documented. Any failure/ equipment switchover shall be documented. List of all equipment, spares/ components etc. shall be prepared. If during ‘Site Acceptance Test’ any defect is noticed in the system, the Bidder shall rectify/ replace the same to the satisfaction of MGVCL at no extra cost.
It shall be explicitly understood that under no circumstances any approval of the jointly MGVCL official & IT representative relieve the Bidder of his responsibility for material, design, quality assurance and the guaranteed performance of the system and its constituents.

**Part III: ** -Helpdesk Services
1. Provide Help desk solution that enables end users to log their complaints or requests and tracks the same till the resolution.
2. 24 by 7 Help Desk facilities for user for the period of 3 year will be provided.
3. Bidder shall set up a centralized helpdesk to log complaints of the users and issue the log ticket number and communicate the corrective measure. Bidder shall provide Customer support interface with E-Mail, online, telephone and onsite support.

**Part IV- SLA reporting**
1. Provide warranty/on-site maintenance for CCTV Surveillance system that shall be supplied and installed under this procurement throughout the period of warranty as per SLA.
2. The support coverage shall be as per “Service Level Agreement”.
3. Ensure that all these equipment integrate and function as per the requirements and meet SLAs set out in this document

**Part V: ** - Service Call Log
**Bidder will have to** maintain Service call register for the supplied items and submit the call log on monthly basis to MGVCL as per the format specified by the MGVCL

**Part VI: ** - Training and Documentation
Bidder shall provide complete technical documentation of hardware, related software, operating systems configurations and customizations along with necessary diagrams. Bidder/SI shall also provide project and design documentation. The documents shall include but not limited to:
1. Factory/ Site test certificates of various equipment supplied.
2. Original Manufacturers manual and warranty cards.
3. Installation certificates of all equipment, description of configuration profile as executed for different equipment.
4. Troubleshooting chart for all equipment, Standard OEM checklist for installation, maintenance etc., if any. Training documents

System Integrator shall provide training for minimum 1-2 days of installation, configuration, commissioning, monitoring and troubleshooting of various equipment like NVR, storage, Backup system, Mobile access associated software, etc. to MGVCL official. The detailed contents, coverage and Methodology for training will be decided mutually by the System Integrator and MGVCL.

a) System Integrator is to provide course material for each trainee
b) Training shall be provided through OEM certified professionals & or bidder only.

The training shall be conducted within 7 days from the date of installation.

**MGVCL SCOPE OF WORK:**
1. MGVCL will provide earthling pits and earthing point for Suitable power and environmental conditions in MGVCL premises of all electronic hardware pertaining to CCTV Equipment. Vendor to connect earthing to the equipment and confirm its working.
2. Providing regulated power supply for CCTV System shall be in MGVCL’s scope of work. Vendor to terminate and commission the same.

3. IP Address list & Lease line, Broadband connectivity provided by MGVCL. Along with related hardware.

4. Vendor to ensure the seamless integration with site CCTV client and remote viewing over the connectivity.

Apart from the details listed above, any other items/services/hardware/software required for the successful completion of turnkey project shall be in Vendor’s scope without any additional cost.