Scope of work for Ash Pond I & II CCTV Trunkey Project

Supply, Installation and Commissioning of complete CCTV shall be executed as a Trunkey project, all the below mentioned jobs shall be in the scope of successful bidder unless mentioned otherwise.

Any material or job not specifically mentioned, but required to complete the CCTV project shall be deemed included in the Successful Bidder's scope.

The work Schedule:

SN	Work Description	Time Period
1	Supply of Material	60 Days from PO.
2	Installation & Commissioning	90 Days from delivery of material.
3	Warranty Period	5 Years from date of Commissioning for Camera and NVR, One year for other Hardware
4	Total Contract period	150 Days from PO

A. <u>Drawing Approval</u>

- a. Before initiating the commissioning activity, the successful bidder shall submit all relevant drawings, including but not limited to installation layouts, network diagrams, and any other project-specific drawings, to the Engineer-in-Charge (EIC) for approval.
- b. The drawings submitted by the bidder must adhere to the specifications outlined in the tender document and any subsequent clarifications provided by OPGC.
- c. The EIC shall review the drawings within a reasonable timeframe and communicate approval or any required revisions to the bidder. Approval shall be granted based on compliance with project requirements and industry standards.

B. Material Supply

- a. Supply of all the materials as specified in Annexure-I.
- b. The technical specification of the all active and passive components, given at Annexure-I has also been served as compliance sheet. The bidder needs to specifically fill and sign the compliance sheet mention as Annexure I. The bidder shall also submit the technical brochure for the quoted item against the bid.
- c. For any deviation from our required specification Successful Bidder should submit a detailed deviation statement where the offered system or subsystem should be of higher configuration and should have added features than the one mentioned in our specification. Deviation statement should mention all such features.
- d. All other components and accessories shall be supplied meeting industry specifications and from reputed brands only. EIC consent shall be taken in case of any multiple choices available for such accessories or items
- e. Any Material which is not specifically mentioned in Annexure-I but is required for completion of project needs to be supplied by the successful bidder for which no additional expenses will be borne by OPGC.

C. Installation and Commissioning

- a. The Successful Bidder shall have 100% statutory & EHS Compliances all through the contract period. Supply of all requisite PPEs shall remain in the scope of Successful Bidder.
- b. In-plant movement of spares, components, personnel etc.
- c. Network/Power cabling and termination for all installed items.
- d. Splicing of all Fiber cable and installation of LIU and Junction Boxes.
- e. Fabrication/Erection of Tripod Tower/Pole/Pipe for Mounting of CCTV camera.
- f. Foundation Construction: Digging holes for concrete footing, pouring and curing concrete for stability.
- g. Assembly of Tower/Pole/Pipe on the foundation with appropriate anchors or Bolts, ensuring stability and alignment.
- h. Mounting of solar panels, Wireless Network devices, weather proof junction box with battery packs and other electronics on the Tower/Pole/Pipe.
- i. Installation of Camera, Network Devices & laying of cable at desired Location as per Annexure-2. Connectivity and Integration of all Network Devices and Camera with NVR. Commissioning of all Supplied Active and Passive Device and CCTV
- j. Successful Bidder shall install, integrate, test and commission all the systems supplied at OPGC site as per approved design, OEM standard procedures and as per the instruction of Engineer in Charge.
- k. All consumable, hardware, tools & tackles are to be arranged by the contractor of approved type.
- l. System shall be installed, configured and programmed to provide good quality video.
- m. All rack mounted systems shall be housed in the rack with proper cable management and labelling shall be done as per standards.
- n. The agency will supply install and test the 32" LED TV on the mounting structure/wall.
- o. If required, the agency will erect the suitable mounting structure as specified in Technical Specification.
- p. The agency will provide the software to customize the display as per the requirements specified in technical specifications.
- q. All the internal Electric Wiring has to be done by the agency using proper cables.
- r. OPGC Engineer-in-Charge or his representative may inspect and test the various portions of the work at all stages and shall have full power to reject all or any portion of the work that he may consider to be defective or inferior in quality of materials, workmanship or design in comparison to what is called for in the specifications. In the event of rejection of any work already executed and not in accordance with specification as in this tender and/or as determined by the Engineer-in-Charge or which the Contractor has been apprised, the Contractor shall carry out alterations/ replacements to such works to the satisfaction of the Engineer-in-Charge for which no additional expenses will be borne by OPGC.

D. System Integration and Handover to Owner

- a. The contractor shall supply following documentations:
 - i. Set of Operational Manuals in hard copy & Soft copy as supplied by OEMs.
 - ii. All the licensed software

- iii. Project write-ups/summary, schematic diagrams and sign-off documents
- iv. Verified list of all the assets with its Sr. No. and locations for identifications & asset management in hard & soft copy.
- v. As Built Drawing (Network Diagram)
- b. Acceptance of the system will be based on successful demonstration of features, functionality and operability and verifications of design parameters as per the functional requirements.
- c. Operational training for each system shall be given to the identified OPGC employees or their representative at site

E. Owner's Scope

- a. Power Supply: Power supply will be extended by OPGC up to installation site, proper termination and connections is to be carried out by the Successful Bidder.
- b. LAN Connectivity: OPGC will provide Ethernet connectivity or Wi-Fi accessibility or both.

F. Special Terms and Condition

- i. On delivery of material, 60% (sixty percent) of cost of material supplied shall be paid.
- ii. Remaining material cost paid after successful installation certification by EIC.
- iii. Services cost shall be paid after completion of each activity as mentioned below:
 - 1. Installation of Camera and associated Hardware
 - 2. Cable Laying and termination (Power & Fiber)
 - 3. Complete commissioning and Integration of system
- iv. Commissioning shall be termed complete after three months demonstration of complete system without any major failure.