Annex A: Technical Specifications & SOW

Introduction:

UNHCR Sub office Gedarif, would like to invite qualified and accredited service providers to provide proposals for the supply and installation of a video surveillance system - Closed Circuit Television (CCTV) in its office compound in Gedarif.

Project scope:

UNHCR SO Gedarif has an office with four floors and roads at both sides. An IP based CCTV system is currently required to cover some critical areas inside the office and outside the perimeter as well. The perimeter has a brick fence that is three meters high. Please refer to annex H of this document for a sketch of the office and the tentative areas that we wish to be covered by the CCTV cameras.

Directional bullet outdoor cameras – with a minimum of IP66 standard will be required to be installed all around the perimeter fence and they should be able to capture the outside of the perimeter fence as well as some small portion of the inside of the fence keeping in mind that there is a three-meter-high brick fence. However, the cameras should be able to capture a bigger portion of the outside part of the perimeter fence. There are existing flood lights all around the perimeter fence which will provide lighting during the night, but for the sake of good quality imagery, the cameras should have night vision feature.

SPECIFICATIONS FOR THE BULLET CAMERAS

- Outdoor, 5MP resolution, day/night, fixed box camera providing forensic WDR and Light finder for demanding light conditions
- Include an IR corrected varifocal 2.8-8.5 mm F1.2 P-iris lens and remote back focus (camera should also support i-CS and DC-iris lenses with CS Mount).
- IR of 40m
- Multiple, individually configurable H.264 and Motion JPEG streams; max 5MP at 25/30 fps in 16:9 format.
- Embedded technology for reduced bandwidth and storage needs.
- Video motion detection and active tampering alarm.
- Two-way audio.
- I/O for alarm/event handling,
- Memory card slot for optional local video storage.
- Serial port for RS422/485 communication
- NEMA 4X, IP66/67 and IK10-rated for operation in -40°C to +55°C and intermittent up to +60°C.
- Powered by IEEE 802.3af Type 1 Class 3 midspan.

Fixed dome cameras will also be needed in some areas of the office building.

SPECIFICATIONS FOR THE DOME CAMERAS

- Day/night fixed dome with support for Forensic WDR, Light finder and Optimized IR with built-in IR illumination. Discreet, dust - and IK08 vandal-resistant indoor casing.
- Varifocal 3.5-10 mm P-Iris lens with remote zoom and focus.
- IR of 30m
- Multiple, individually configurable H.264 and Motion JPEG streams.
- 5 MP at 30 fps with WDR.

- Embedded technology for reduced bandwidth and storage.
- Video motion detection and active tampering alarm.
- Memory card slot for optional local video storage.
- Power over Ethernet.
- Mounting bracket for wall/ceiling or junction boxes.

The system should have a network video recording (NVR) system that stores the CCTV footage for at least 30 days.

SPECIFICATIONS FOR THE NVR (24 CHANNELS)

- A twenty-four channel Client/ Server for rackmount.
- Preloaded with Camera Station software with preconfigured Camera Station settings and all other necessary software e.g. Windows 10.
- Support up to 4k ultra-HD.

VIDEO/AUDIO INPUT

- Must be capable of up to 24 channels
- Must have the following resolutions 6MP, 5MP, 4MP, 3MP, 1080p, UXGA, 960p, 720p, XGA, SVGA, D1, CIF, QCIF
- Shall have H.264 compression format
- Must have up to 240Mbps incoming bandwidth

VIEWING

- Shall have 1x HDMI and 1x VGA
- Must comply the following Multi screen display for client:1, 3, 4, 9, 12, 16, 20, 25, 30, 36, 42, 49, 56, 63, 64 1+5, 1+7, 1+8, 1+9, 1+11, 1+15, 1+16, 1+33, 1+47, 1+48
- Must comply up to 4 simultaneous screens
- Must have E-mapping and can do live-viewing

RECORDING

- Must have Manual mode, Continuous mode, Schedule mode and
- Event (Pre / Post) mode
- Must be capable of Tagging

SEARCH & PLAYBACK

- Must have Date & Time (Calendar) and Event search modes
- Must have 16 x 4K@30fps or 16 x 3MP@30fps resolution for Playback (client)
- Must have the capabilities to Slow forward, Fast forward, Loop, Single frame, E-PTZ and Slice playback

STORAGE

- Shall have capacity of at least 10 TB
- Must have disk dormancy
- Must be capable of external storage with Max. 100T and Max. write speed 128Mbps

AUDIO

- Must have audio compressions G.711a, G.711u, ADPCM, G.722,
- G.722.1c and AAC-LC

ALARM

- Shall have Alarm input, Video lost, Motion detection, Tampering, Guard line, Defocus, Scene change, enter guard area, Exit guard area, Object left, Object removal, Gathering and Audio surge as service alarm triggers
- Shall have system alarm triggers especially MAC address conflict

NETWORK

- Must have network protocols TCP/IP, UDP, HTTP, DHCP,
- DNS/DDNS, RTP/RTCP, RTSP, PPPoE, FTP, SNTP, VSIP, UPNP,
- SMTP, IPv4, IPv6 (optional)
- Must have functionalities of NAT, Socks5, Multiple access of network, Packet loss recovery and Auto organizing of network
- Shall support Network Testing

INTERFACE

- Shall have 1 x Gigabyte network port, RJ45 interface
- Shall have RCA Line for audio in and audio out
- Shall have at least 1 VGA and 1 HDMI
- Must have minimum 2x USB 3.0

OPERATING

- Conditions Shall operate up to 55°C and 10%-90% relative humidity
- Regulatory Must be CE, FCC and Rohs listed

A complete new structured cabling will have to be installed for this CCTV system with its central location in the server/guard/security room. Appropriate cabinet will need to be provided to accommodate the devices in the rooms mentioned above. Reference to Annex H, it will be good to note the distances from the server/guard/security room to the different areas to be covered by the cameras and provide a practical proposal for connecting the cameras to the server/guard/security room. Any installation of outdoor cables will have to be installed using conduit and the place for each camera installation is in Annex H. The cabling will also need to be done in a way that does not interfere with other existing installed cabling.

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CCTV Lay Out
UNHCR Gedaref Field Office

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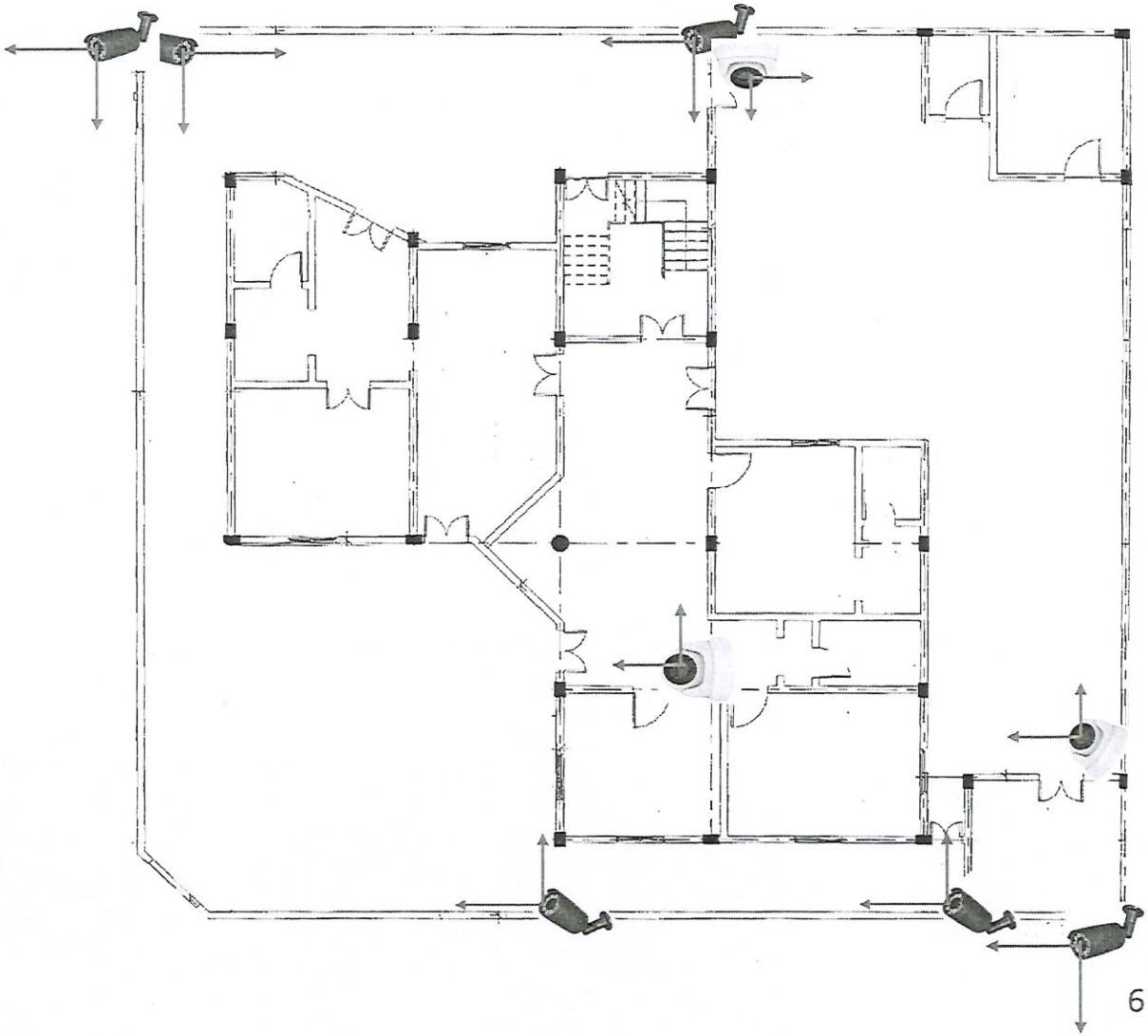
Gd Floor



Outdoor

Indoor

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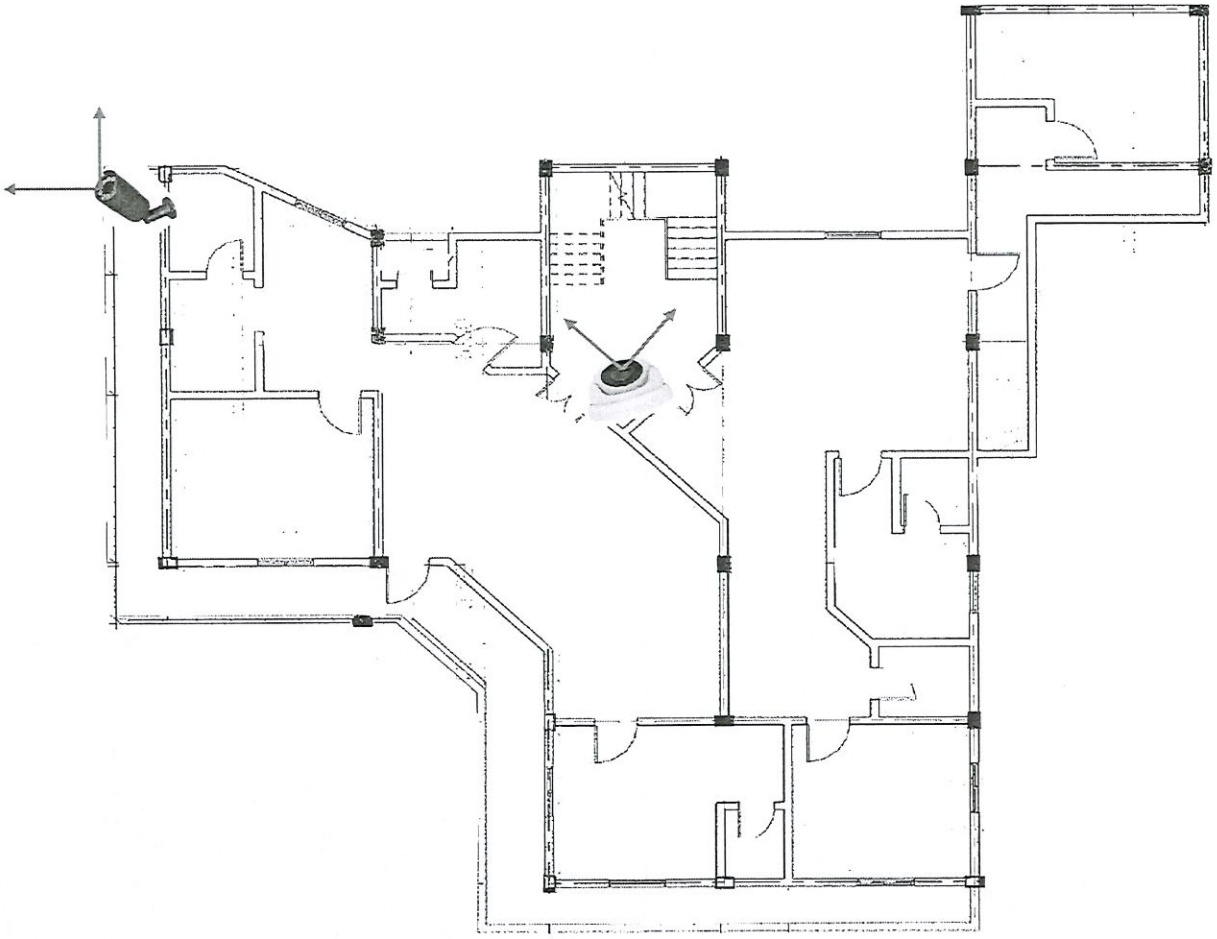
1st Floor



Outdoor

Indoor

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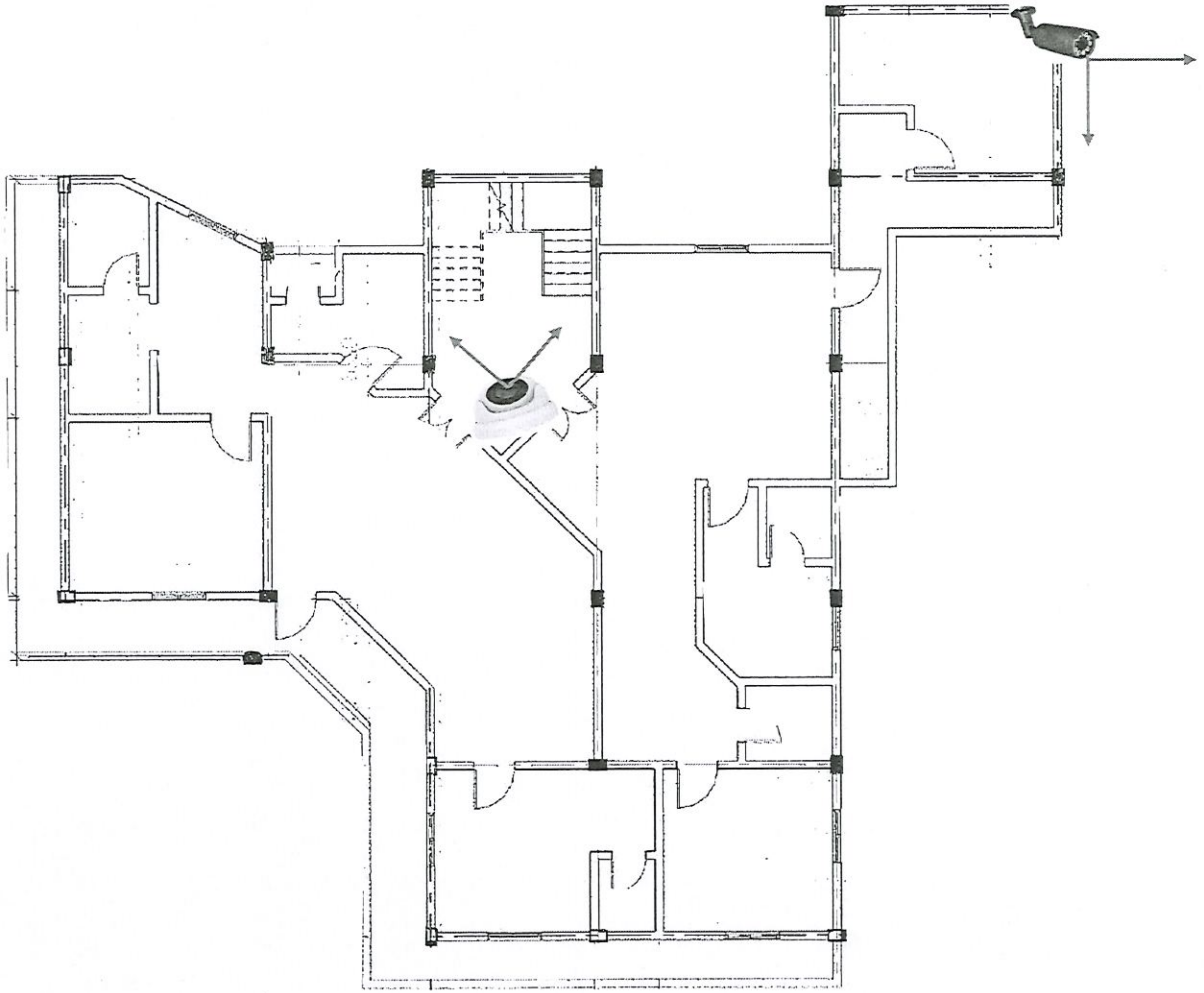
2nd Floor



Outdoor

Indoor

TV screen

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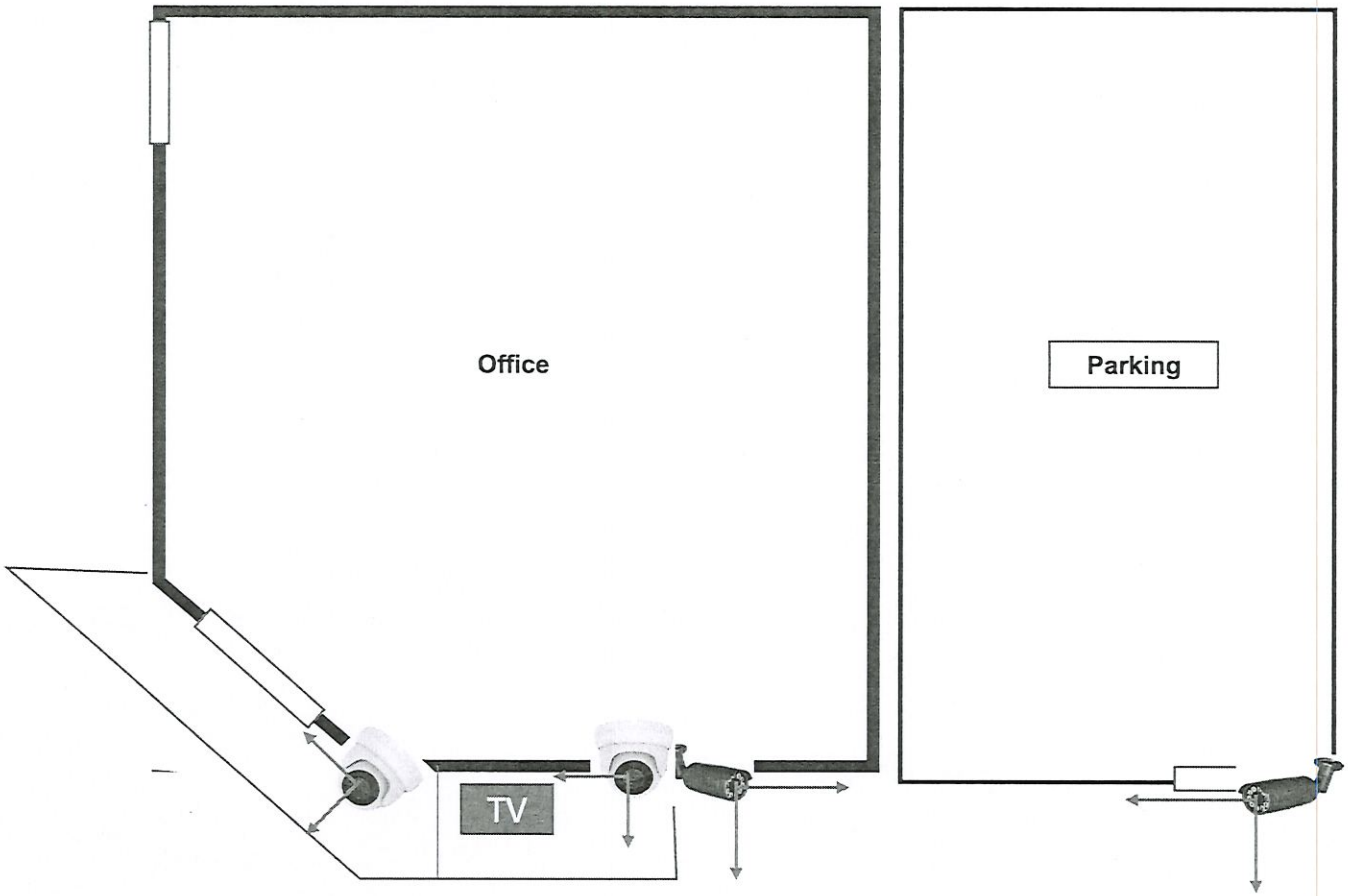
Main Access



Outdoor

Indoor

TV TV screen

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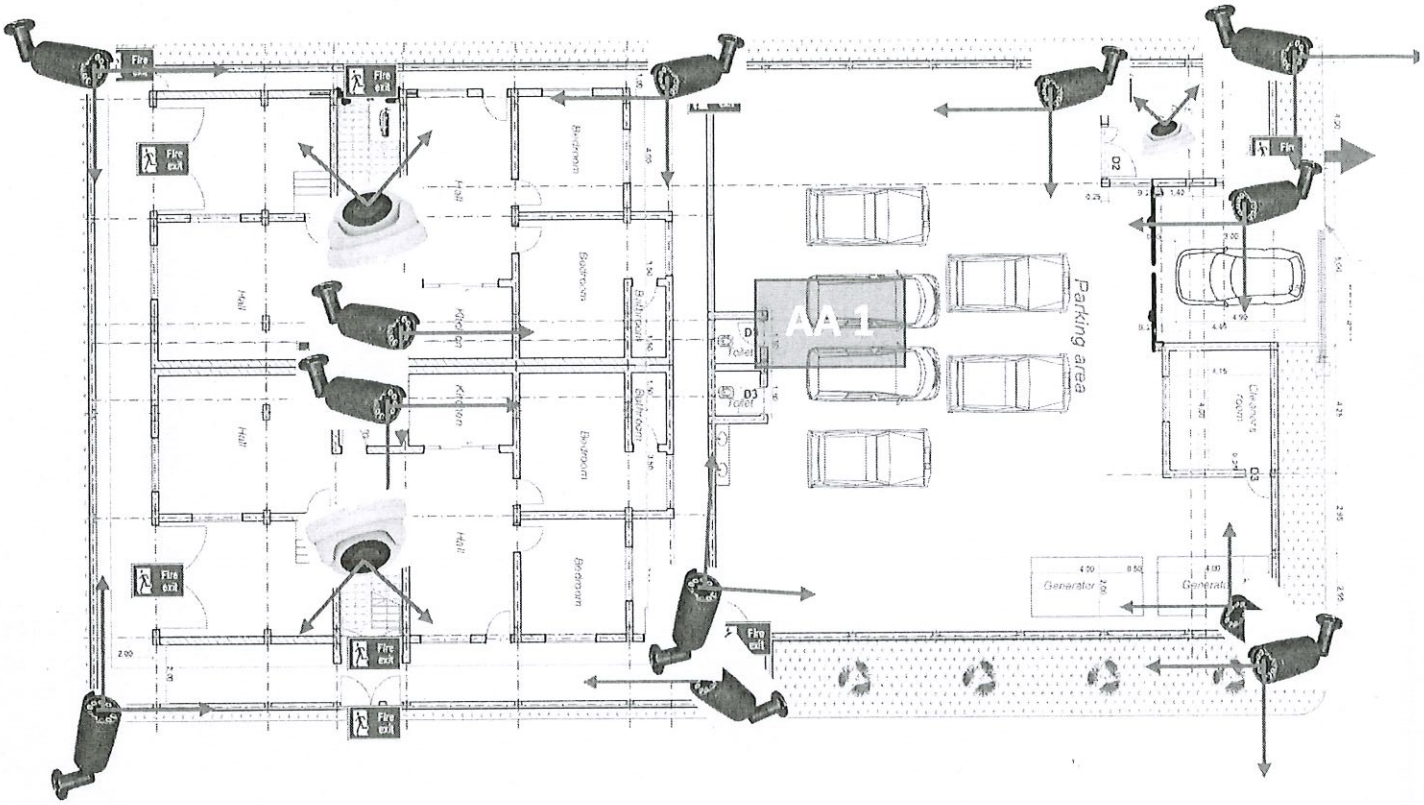
Sakki Hadid/ Railway Guesthouse