**1. Forward**

1.1 Petersfield Town Council (PTC) wishes to install security cameras at three locations and invite formal responses to the attached list of requirements.

1.2 PTC ideally wants “Turn-Key” proposals where all the work is tendered for, however each section identifies the Mandatory elements **(M) and** the Desired elements **(D)**.

1.3 Preference will be given to those tenders 0ffering both the (M) and (D) options.

1.4 Each line-item item should be individually costed.

1.5 PTC encourages other ideas and suggestions within Annexes to proposals.

1.6 Questions/requests for site visits should be submitted via email to Steve Field.

1.7 Formal responses must be received by 1700 on 30th April 2019. Responses received after this time may not be considered.

**2. Objectives/Requirements**

2.1 PTC wishes to improve security on some of the grounds and buildings which they own.

2.2 The cameras will not be permanently monitored but recordings will be accessed from storage should an incident be identified or notified.

2.3 As far as possible, images of a quality that stand a reasonable chance of prosecution of individuals are required.

2.4 “Live” motion capture is not a priority, so lower frames-per-second are envisaged. Calculation should be based upon 8fps. **(M)**

2.5 Images to be stored for >1 month and then over-written automatically on a FIFO basis. **(M)**

2.6 Compression algorithms to at least H.265 should be offered. **(M)**

2.7 It is recognised that, generally, day-time images from most modern cameras will meet the objective of 2.3 and that night-time low-light images are far more challenging, thus the text within focuses on this, and requests for example still and moving images at night for each camera type are a Mandatory requirement. **(M)**

2.8 It is recognised that there are “trade-offs” and compromises with picture quality. The areas themselves do not need to be visible at night as if daylight, however they should be able to identify humans and vehicles once they enter the target zones and these images should be of such a quality that a human or car moving at normal walking pace (3mph) should present an unblurred frame. In other words, very slow exposure speeds and high levels of “gain” (with associated noise in the image) will not be accepted. Exposure settings will not be lower that 1/25th sec, preferably 1/50th sec **(M)**

2.9 The different requirements for day and night-time images means an ability to switch settings, including exposure speeds, gain and electronic image adjustment (such as back-light settings etc) is desirable. These may be switched automatically by the camera detecting light levels, but it is also desirable to be able to switch between day/night settings on a manual basis. Brief details should be provided and the most favoured vendors will be asked for further details **(D)**

2.10 Further to 2.7, it is envisaged that the close-range cameras will be “standard” but that cameras with longer range requirements will have special abilities for night-time, for example (but not limited to) larger CMOS sensors, 4Megapixel or lower, large infra-red transmitter(s) and optimised software. **(D)**

2.11 It is anticipated that IR flood lighting will be required (Petersfield is within the South Down National Park which has a “Dark Sky” policy) and this should be able to switch itself on/off depending upon light levels. Appropriate IR floods should be quoted, stating position, range and spread of each. Information on individual IR floods should be given within the quotation for each of the three sites. **(M)**

2.12 As mentioned, cameras will not be monitored in “real-time” so whilst a zoom capability (manual at set-up or via remotely-remotely-controlled motor) is useful to establish the area to be covered, remote pan/tilt/zoom is not necessary.

2.13 Each camera must be able to be monitored in real-time, both in high quality HD (the main stream or primary channel) and on a lower resolution/FPS secondary channel, from any location. Any software, whether FoC or chargeable, should be identified for each of the 3 sites, plus the Town Hall (Windows PC-based) and other Internet based phone/PC/Mac-based locations. **(M)**

2.14 Each site will have its own NVR and will be accessible remotely for image play-back and capture via a secure network connection (over the Internet). Most remote access will be from the Town Hall, although other access (eg via mobile app) will be required. (M)

2.15 Each NVR should be accessible via its local wifi for image recovery, and playback. This should be via a login to the NVR with at least two passwords required. **(M)**

2.16 Any software required for the local image recovery (2.13) should be identified. **(M)**

2.17 The information for each specific camera’s ideal (horizontal) field of view (FoV) and approximate range is given or alternatively the angle of view is provided. Responders should give details of fields of view (horizontal and vertical), or angle of view where requested. Responders should ensure via site visits that these distances are accurate. **(M)**

2.18 Cameras mounted at a height of less than 2.5m are required to be “vandle-proof” **(M)**. Those mounted above 2.5m need not be, but responders may offer this.

2.19 PTC will provide suitable network connections and electrical power supply. Responders must indicate the minimum network requirements including upload/download speeds. **(M)**

**3. The Pavilion**

The Avenue, Petersfield

**3.1 Overview**

3.1.1 This site is owned and run by PTC with an Internet connection.

**3.1.2 The NVR will be located inside the building in a location agreed with PTC.**

**3.1.3 PTC will provide a 13A fused spur for connecting to the rack MDU.**

3.1.4 A number of cameras will be mounted on, in effect, a first floor window which gives good coverage East to South.

3.1.5 Some will be mounted on outside walls at approximately 2m high

3.1.6 Some on the South-facing eves with views SE-SW

3.1.7 Some will be on a de-mountable pole just outside the SE corner of the tennis courts.

**3.2. Cameras**

3.2.1 Main vehicular access

3.2.1.1 Located on second floor East-facing eve.

3.2.1.2 Range approx 35m, FoV 12m

3.2.2 Pedestrian gate only

3.2.1.1 Located on second floor East-facing eve

3.2.1.2 Range approx 33m, FoV 12m

3.2.3 Second vehicular access to the grounds and pedestrian access (opposite Weston Rd)

3.2.3.1 Located on second floor eve.

3.2.3.2 Range approx 73m, FoV 15m

3.2.4 Car park

3.2.4.1 NW corner of building @2m

3.2.4.2 90 degree FoV

3.2.5 Main Entrance

3.2.5.1 NW corner of covered outside entrance @2m

3.2.5.2 90 degree FoV

3.2.6 Main South-facing windows

3.2.6.1 East pillar, facing west along the windows

3.2.6.2 60 degree FoV

3.2.7 Boule and basket-ball areas

3.2.71 2 x cameras South wall @2m

3.2.7.2 90 degree FoV

3.2.8 Toilet access

3.2.8.1 By kitchen window, through alley to toilets @2m

3.2.8.2 45 degree FoV

**3.2.9 Inside to kitchen window and fire exit door**

3.2.9.1 In kitchen above internal door @2m

3.2.9.2 60 degree FoV

3.2.10 Main football pitch

3.2.10.1 2 cameras South facing eves

3.2.10.2 Each with a min of 6mm-12mm lens

3.2.11 Second vehicular access to the grounds and pedestrian access (opposite Weston Rd)

3.2.11.1 Mounted on pole corner of tennis courts @ Xxm (8?)

3.2.11.2 Range 90m FoV 15m

3.2.12 Wider viewTennis courts and back towards The Pavilion

3.1.12.1 2 x cameras mounted on pole corner of tennis courts @ Xxm (8?)

3.2.12.2 Each with a min of 6mm-12mm lens

3.2.13 South side of tennis courts

3.2.13.1 Mounted on pole corner of tennis courts @ Xxm (8?)

3.2.13.2 70 degree FoV

**3.3 Light**

3.3.1 This area has little, or virtually no artificial light at night. Some background light does come from a few street lights on The Avenue and from houses around the periphery of the site. The pavilion itself has no permanent lights switched on

3.3.2 Vendors are required to propose appropriate IR flood lighting, particularly for the various gates/entrances to the grounds, together with specifications (which must include horizontal spread and assurances that the target areas will be sufficiently lit to acquire the required images). **(M)**

3.3.3 Where the lighting is provided by the cameras’ built-in IR, details on the maximum range that will provide the required images must be detailed. **(M)**

**3.4 Services**

3.4.1 **Power and secure space for the NVR will be provided inside The Pavilion (location to be identified) Responders should provide all cabling (CAT6) from here to the cameras, other than tho**se on the pole by the tennis courts. **(M)**

3.4.2 Responders should assume that the pole by the tennis courts is provided, that there is power and a single Ethernet CAT6 to the base of the pole and cabling from there to the cameras should be quoted for together with any necessary switch. **(M)**

3.4.3 Responders are requested to quote for providing the pole, power and Ethernet to the pole by the tennis courts. There exists a recent conduit installed from the Pavilion to the electric tennis court gates. There is power at the tennis court gates but Ethernet will need to be brought from The Pavilion (taking into account maximum driving distances is PoE over CAT6 cable. **(there may be a mouse cable in the existing conduit)** **(D)**

3.4.4 The pole itself should be aroundless than 4m high, have a system for lowering/demounting for camera lens cleaning etc, and have a system for discouraging climbing. **(M)**

**3.3.5 The NVR is to be mounted in a 19” rack with lockable front & rear panels. the rack is to be installed as part of the solution and shall include a Mains Distribution Unit (MDU), suitable PoE ethernet switch/hub and an uninterruptable Power Supply (UPS) sufficient to maintain the NVR and switch f**or at least one hour. cupboard. **(M)**

**4. Love Lane** Playing Fields

Love Lane, Petersfield

**4.1 Overview**

4.1.1 The playing fields, Pavilion and football ground are owned by PTC.

4.1.2. The football ground is leased to Petersfield Town FC and whilst no cameras will be located within the grounds, PTC wish to monitor some of the boundary fencing from the outside.

4.1.3 The Pavilion is rented/leased (??). Petersfield Town Junior FC use the West entrance for their changing rooms and a child play group rent/lease the east end of the building. Privacy Masks will be required for the play group should their area be covered by the CCTV.

4.1.4 PTC will provide Internet connection (without Router) to the NVR location.

4.1.5 T**he NVR will be located inside the building in a location agreed with PTC**.

4.1.6 **PTC will provide a 13A fused spur for connecting to the rack MDU**.

4.1.7 A number of cameras will be mounted on the East-facing first floor of the Pavilion which gives good coverage NE to SE

4.1.8 Some will be on a de-mountable pole on the NW corner of the Pavilion, providing views of the car park (North) and from the NW to SW

4.1.9 Some will be on a de-mountable pole by the skateboard area, providing views of the skateboard area and football fence

**4.2. Cameras**

4.2.1 The SW corner of the football club fence providing coverage of those using this route to/from the skatepark.

4.2.1.1 Mounted on the east wall of the Pavilion

4.2.1.2 Range approx 45m with FoV of 10m.

4.2.2 The football fence from the SW corner northwards

4.2.2.1 On the East-facing wall of the Pavilion

4.2.2.2 Angle of view of around 55 degrees. Range 30m

4.2.3 As 4.2.2 but monitoring the immediate area to the North.

4.2.4 Entrance to the car park and West to the the gated entrance from the car park to the playing fields.

4.2.4.1 Mounted on a pole at the NW corner of the Pavilion.

4.2.4.2 Range 60m FoV 30m.

4.2.5 NE covering the car park entrance and the entrance to the football club.

4.2.5.1 Mounted on a pole at the NW corner of the Pavilion.

 4.2.5.2 40 degree angle range 35m

4.2.6 Covering from the carpark to the N/NE

4.2.6.1 Mounted on a pole at the NW corner of the Pavilion.

4.2.6.2 Approx 90 degree lens. Range 20m

4.2.7 Covering NE/SW

4.2.7.1 Mounted on a pole at the NW corner of the Pavilion.

4.2.7.2 Approx 90 degree lens. Range 20m

4.2.8 East/NE covering the skate bowl, football fence and area to E.

4.2.8.1 Mounted on a pole located by the skatepark - against the boundary fence with the Football Club just to the west of the skate bowl is a small gravelled area. 4.2.8.2 Range of 30m FoV 55 degrees.

4.2.9 Skate bowl E to S

4.9.2.1 As 4.2.8.1

4.2.9.2 90 degree FoV range 15m

4.2.10 Boundary fence to East and further S.

4.2.10.1As 4.2.8.1

4.2.10.2 FoV 90 degrees. Range 20m

4.2.11 SW corner access.

4.2.11.1 As 4.2.8.1

4.2.11.2 Range 60m FoV 12m

**4.3 Light**

4.3.1 This area has no artificial light at night.

4.3.2 Vendors are required to propose appropriate IR flood lighting, particularly for the various gates/entrances to the grounds and the two cameras monitoring the SW corner of the football club fence, together with specifications (which must include horizontal spread and assurances that the target areas will be sufficiently lit to acquire the required images). **(M)**

4.3.3 Where the lighting is provided by the cameras’ built-in IR, details on the maximum range that will provide the required images must be detailed. **(M)**

**4.4 Services**

4.3.1 Power and secure space for the NVR will be provided inside The Pavilion at (location to be determined). Responders should provide all cabling (CAT6) from here to the cameras attached to the Pavilion building. **(M)**

4.3.2 Responders should assume that the two poles (NW corner of Pavilion and skate park) are provided, that there is power and a single Ethernet CAT6 to the base of the pole and cabling from there to the cameras should be quoted for together with any necessary switch. **(M)**

4.3.3 Responders are requested to quote for providing the two poles, power and Ethernet to the poles. **(D)**

4.3.4 The poles themselves should be no more than 4m high, have a system for lowering/demounting for camera lens cleaning etc, and have a system for discouraging climbing. **(M)**

4.3.5 **An appropriate Internet service will be available in the NVR cupboard. There is no existing router.**

**5. Bell Hill** Play Ground

Bell Hill, Petersfield

**5.1 Overview**

5.1.1 This park, children’s play area and car park are owned by PTC.

5.1.2. The Air Training Corps building in the SW corner is owned by the ATC and it is not planned to have any cameras or equipment mounted on this building.

5.1.3 There is currently no Internet connection, but this will be provided prior to installation of cameras.

5.1.5 **The NVR will be located in a exterior cabinet**

5.1.6 **Power will be available**

5.1.7 All cameras will need to be mounted on poles of less than 4m (planning permission limit).

5.1.8 Some will be on a de-mountable pole in the SE corner childrens’ play area.

**5.2. Cameras**

5.2.1 The car park, its access and the small pedestrian entrance to the play ground.

4.2.1.1 Mounted near the NE wall of the ATC building on the SE facing wall.

4.2.1.2 Range 15m with FoV of 60 degress. @2m

5.2.2 Vehicular access to the play area and looking E to Bell Hill

4.2.2.1 On the NE wall of the ATC building @ 4.5m

4.2.2.2 Angle of view of around 50 degrees. Range 25m

5.2.3 looking across to Bell Hill and towards the NW

5.2.3.1 On the NE wall of the ATC building @ 4.5m

5.2.3.2 Angle of view of around 50 degrees. Range 25m

5.2.4 Facing NE covering the pedestrian gate and fence towards the NE, covering the seat.

4.2.4.1 Mounted on the pole in the SE corner of the playing area.

4.2.4.2 Range 38m FoV 19m.

5.2.5 From the gate providing vehicular access and towards the NE.

4.2.5.1 Mounted on the pole in the SE corner of the playing area.

 4.2.5.2 Range 45m FoV 15m

5.2.6 SW hedge line and N

4.2.6.1 Mounted on the pole in the SE corner of the playing area.

4.2.6.2 Approx 60 degree lens. Range 20m

5.2.7 Closed play area

4.2.7.1 Mounted on the pole in the SE corner of the playing area..

4.2.7.2 Approx 45 degree lens. Range 30m

**5.3 Light**

4.3.1 This area has no artificial light at night, however there is “overspill” from the flats, although this cannot be relied upon.

4.3.2 Vendors are required to propose appropriate IR flood lighting, particularly for the various gates/entrances to the grounds and the play area itself, together with specifications (which must include horizontal spread and assurances that the target areas will be sufficiently lit to acquire the required images). Power requirements are also required **(M)**

4.3.3 Where the lighting is provided by the cameras’ built-in IR, details on the maximum range that will provide the required images must be detailed. **(M)**

**5.4 Services**

5.3.1 **Power and secure space for the NVR will be provided using a exterior secure cabinet. Responders should provide all cabling (CAT6) from here to the cameras attach**ed to the poles. **(M)**

5.3.2 Responders should assume that the pole (SE corner of play area) is provided, that there is power and a single Ethernet CAT6 to the base of the pole and cabling from there to the cameras should be quoted for together with any necessary switch. **(M)**

5.3.3 Responders are requested to quote for providing the pole, power and Ethernet to the poles including civil works such as moling etc for cable conduits. **(D)**

5.3.4 The pole itself should be around xx8??m high, have a system for lowering/demounting for camera lens cleaning etc, and have a system for discouraging climbing. **(M)**

5.3.5 The Internet service is a XYZ (at XYZMbps upload speed) and will be available in the NVR cupboard.

**6 Other (M)** all except for 6.10 are mandatory.

6.1 Responses should follow the format of this document and use the same numbering system for each point.

6.2 All software necessary to run the system, whether FoC or chargeable, should be identified, together with appropriate information and any/all costs (M).

6.3. Any costs not covered within should be identified.

6.4 Warranty should be stated.

6.5 Terms & Conditions should be provided, as should Payment Terms.

6.6 Lead-time to start work from placement of order should be stated, as well as the anticipated time to complete the work.

6.7 Any services/facilities needed from PTC or other third-third-parties should be identified.

6.8 As per 2.7, relevant examples of both video and still images for each camera type is required, together with the configuration of the camera (at least exposure setting, gain and back-light) together with the lens details and range of the shot(s).

6.9 It should be assumed that all cameras will run/record 24/7

6.10 It must be possible to set Motion Detection and/or Line Crossing such that this is identified on the play-back “Time-Line”, making it simpler for the operator to identify times of interest.

6.11 Details of the NVRs should be provided, including brochures (soft copy for all brochures, including cameras, is acceptable), number of logical ports, number of PoE ports, number of hard-drive bays, maximum possible size of each drive bay, size of disks provided and anticipated number of days of storage.

6.12 PTC welcomes any other comments or suggestions identified in separate Annexes.

END