

Sirs,

Based on our walkthrough the other day, we propose the following:

Please be advised there are several minor adjustments and options the may or may not affect the overall cost of this system. For cost reasons, as shown below, we have attempted to take the middle ground in equipment reliability (recommended); and the higher ground in the installation quality and maintenance, as this is where most problems develop over time.

For reliability reasons, it is advised to operate two separate 8 channel remote control DVR units on the same IP address. This is easily done and gives you the excellent option of being able to have an onsite swap unit in the future. In our experience, single 16 channel units become overburdened in this application and, if the unit locks up in the years to come (which they can due to power fluctuations or drive failure etc.) an onsite swap unit is ideal. Don't worry; access to both units would be seamless and very easy.

The cost of adding or removing a camera or two is very small on this type of job *if it is built in at the beginning*, so we propose to use all available 16 channels from the start. Adjustments in the future are quite easy if the complete infrastructure is installed all at once.

With the use of hidden cameras your application is not complicated, but it is intricate, and so has required some careful thinking for longer-term success.

Property sketch (removed from web version for privacy reasons)



This is your user interface, two are supplied in this job specification.

Some system concepts:

Most of the cameras we use include infrared (IR) lighting, but this function is excluded in hidden cameras as the emitters do make a small reddish glow thus revealing the camera locations.

Exposed cameras are a great and very effective deterrent, but have the drawback of being easily damaged. In all applications like this, especially the back sides of the properties, we advise that cameras are able to “see” each other. This has a very good effect in reducing vandalism of the cameras.



Concept picture: Damage a camera and the other captures it. (Your application has smaller cameras.)

Infrastructure:

1) Front gates and front parking areas are covered by four cameras: numbers 1, 2, 15 and Z. Where the cabling cannot be completely concealed in the walls, we propose to install conduit and box mount cameras for better long-term protection of cabling and connections. Cables on rooftops are proposed to be surface-run to reduce conduit installations costs, and outdoor rated UV-resistant cables are excellent for this purpose. Sample camera pictures below:



2) Rear garage and alley area is to be covered from above with two cameras, numbers 5 and 8, in a tie-and-hang system, using very small wide angle units for overall activity recording. A hidden camera will be positioned as an ID camera number 6 in the alley on your property, to assist in getting the facial close-ups required for successful prosecuting (if needed).

We use very small cameras in very innovative ways to get the “ID shot”, then referencing the field cameras to tie the ID shot to the activity. On ID shots, it is smart to consider how to catch someone with a hat or hoodie on and the best chance for capturing a face picture. Sample pictures below:

----> Outside of problem area for action shot...



----> And inside, to be able to more successfully capture a face picture.



----> Backlighting is a big problem. Therefore, close-ups are required to get a “good ID”.

3) Three hidden cameras are proposed in the rear and central walk paths: numbers 10, 13 and 14. We would like to leave a bit of flexibility in these areas for onsite testing for the best performance.

4) The back entry ways for both properties are proposed to be monitored with back-facing exposed cameras, numbers 3, 4, 11 and 12, for visual and real deterrent reasons. If this recommended coverage is not allowed, then \$267 can be removed from the proposed price, downgrading to 14 cameras.



----> Inside view of a successful application.



----> Actual size of camera.

5) One camera, number 7, is proposed for the space between the buildings in the alley. It is recommended and proposed to use a visible surface mount camera for the clearest picture and deterrent factor.

6) We are proposing that we quote in camera number 9. This is part of the initial infrastructure and we would prefer to install it in a location observing the back walkway and property line; this is where we feel it would be best to use this last part of a complete system.

7) The proposed price for our recommended system includes three hours of setup and training to assure you have easy operation and comfortable access to the recordings and some of the more complex areas of programming for motion detection grid recording etc.

8) This system comes with a one year, parts and labor warranty on all equipment for workmanship and installation failure only. This warranty does not and cannot include abuse or vandalism of components or infrastructure—this is why we recommended back-looking cameras be installed.

9) Cameras need adjusting and cleaning from time to time, especially hidden ones. During the warranty period we recommend including two system “refresh service” calls, valued at \$369 each, to check the electronic health of the system and to clean and adjust the cameras as needed and to interface with you to ensure your best use of the system. These pre-scheduled calls should be done approximately every five to six months with your attendance. If you do not want this service, you can remove \$738 from either remote DVR system price.

Our recommended dual 8 channel remote DVR system with 16 cameras installed to our specifications would be \$6,919. A single 16 channel remote DVR system with larger hard drive would be \$7,177.

Our recommended system with pre-scheduled service the total would be \$7,657.