



**Security Master Plan and Standard
for
Yuba Community College District**



Submitted by:
Christopher S.M. Wilkinson
Chief of Police

SECTION 1.0 INTRODUCTION

The Yuba Community College District Security Master Plan is to provide the District with a criteria based system for the selection and implementation of physical and electronic security hardware for new and existing buildings. The Security Master Plan (SMP) to define district and campus standards for the security systems and hardware to be utilized. The security systems include the Access Control and Alarm Monitoring System, the Internet base camera system, and the Security Communication System. A Glossary of Terms and abbreviations used within this document can be found in Appendix A.

Prior to the development of the SMP, YCCD Police Department and Information Technologies worked with Howard Security to develop the “Recommendations for Selection of an Electronic Security System” for the District. This document included pertinent information regarding electronic security systems in general and focused specifically on the implementation challenges of electronic security systems throughout the various District Campuses. YCCDPD goal is to provide quality access to technology, guidance in the making of technology decisions, and technical expertise to support the SMP.

We view technology as a tool to support the Yuba Community College District's teaching and learning mission. The heart of these systems will reside in the District Police Station located on the Yuba College Campus.

This SMP, YCCD Police Department, Information Technologies, and Howard Security performed site surveys and conducted numerous interviews with key YCCD staff and campus police personnel. The results of these efforts are included below and are divided into five primary categories: Security System Requirements, New Building Construction, Existing Building Renovation, Parking Requirements and Site Requirements. (For the purpose of the SMP, “Existing Building Renovation” should be taken in reference to security system replacement and/or upgrades and is not intended to imply or be related to Architectural and/or Tennant Improvements to existing buildings. However, the SMP will

be provided to all Architectural and/or Tennant Improvements to existing buildings include the security systems discussed in this SMP.

Each of the categories is introduced with explanations of the reasons used to establish the criteria, followed by a prioritized listing of the criteria.

SECTION 2.0 SECURITY SYSTEM REQUIREMENTS

2.1 Security Command/Dispatch Center

District security and police services are administered by the District Police Department. The Department consists of sworn police officers and cadets. The District Police Office will be relocated from building 1600 to a new location on Yuba College. Police officers are on duty 24 hours a day, 7 days a week. Police dispatch will be located at the front desk of the District Police Office. The dispatch desk is manned during office hours, Monday through Friday 8am to 5pm, and (closed Saturday, Sundays, and District Holidays). After hours, District Police can be contacted via a public safety telephone number for non-emergencies, Yuba County Sheriffs Dispatch Center or Woodland Police Department Dispatch Center.

Effective monitoring and control of physical security systems is an essential element to the YCCD complete Security Program. The Access Control and Alarm Monitoring System (ACAMS) and security camera systems can function in a stand-alone mode or with central station monitoring. However these modes are typically used only for incident investigations and the full benefits and features of the systems are not utilized unless the systems are being actively monitored. By creating and staffing a Security Command/Dispatch Center (SCDC) in the new District Police Station, inherent threats to District property, employees, students, and visitors can be prevented or deterred while in progress. A new Security Command/Dispatch Center will provide the District with the ability to act in a proactive manner 24 hours a day, 7 days a week, 365 days a year. Vulnerabilities, which otherwise would be unmitigated due to latent alarm response time, can be more effectively addressed by District Police. Additionally, police staff would have the ability to monitor other campuses and view live video upon alarm call-up,

allowing a more effective response to alarm conditions. For these reasons described, the District will develop a Security Command/Dispatch Center within the District Police Station and fully staff the SCDC.

The SCDC will incorporate a security console where all District security related monitoring and communications equipment are housed. The SCDC will be provided with separate equipment racks in a Security Equipment/ IT Room where the District security systems infrastructure is housed. This would include ACAMS, Monitors, and SCS servers, network routers, fiber optic transceivers, T1 lines and other equipment required to facilitate monitoring and communication from all District campuses and facilities.

Typically during normal business hours, two individuals are required to staff a SCDC of this configuration. The first individual is tasked with monitoring the Districts security systems and dispatching police officer(s) and cadets. The second individual is tasked with staffing the security/reception Security Command/Dispatch Center desk during business hours as is done currently. After-hours the SCDC can be effectively staffed by one individual provided that the SCDC operates on a 24 hour per day schedule year round. A fully staffed SCDC will allow the District Police Department to more effectively respond to security issues and alarms as well as eliminate the current need to rely on other outside law enforcement agencies.

2.2 Access Control and Alarm Monitoring System

ACAMS have evolved into highly sophisticated yet user-friendly tools to effectively and efficiently manage, control, and secure facilities and the surrounding site. When properly designed and installed, modern systems increase the ability to properly detect, delay and respond to potential security breaches. In general, a well developed electronic security program elevates the effectiveness of building management, increases the security of employees and information, and raises the effectiveness of law enforcement in apprehending and prosecuting individuals who commit crimes in and around the facilities.

All future building renovation and new construction include security field panels and devices that communicate with and are controlled by the new ACAMS server with the goal of converting all District facilities to a single integrated system over the next six years.

Understanding that there may be locations where the criteria for ACAMS card readers are not justified but a level of security above mechanical keys is required, for the District standards for an electronic, stand-alone door control system, typically referred to as “Cyber locks”. Cyber lock systems typically use passive electronic cards or key fobs to control access. While they do not provide a level of security on par with an ACAMS, they do allow for an effective single point of controlling access privileges. The stand-alone Cyber lock door units incorporate electrical locks and system memory. Each unit is programmed with an individual identity code. Card or fobs are programmed at a centralized location to allow access into any individual unit or group of units. The card or fobs can be programmed with expiration dates and times so that key control can be more effectively managed. Additionally, if cards or fobs are lost, the unit memory at the door locations can be erased without incurring the expense of re-keying doors. Finally, the District may incorporate Cyber Locks within existing buildings to increase the level of physical security until such a time as funds are available to renovate the existing security system within the building. Because of these features and the inherent advantage over mechanical keying systems, Cyber lock system is an effective adjunct to the Districts ACAMS.

2.3 Internet Base IP Security Camera Systems

Woodland College and Clear Lake Campus currently use the IP Security Camera System. YCCDPD and Information Technologies are working close together and have established a standard. The district currently uses the Video Insight's IP video surveillance software which allows the YCCDPD staff to view live and recorded video from IP cameras on the server, Network Client or Web Client. The software currently supports 11 IP fixed and pan-tilt-zoom cameras on the Woodland College and Clear Lake Campus and can be

expanded to hundreds of cameras from leading camera manufactures including the Axis brand IP cameras that are being used by the district.

The digital video IP systems will help to supplement the ACAMS to provide a comprehensive approach to security. The IP security camera system has extended the district coverage and response without adding additional staff. Recent enhancements in technology have revolutionized the industry with the advent of digital video recorders, network compatibility, ultra low light sensitive cameras and direct integration with other security equipment. YCCDPD and Information Technologies will expand the IP Security Camera System and install a IP Security Camera System incorporating digital recording technology, which will provide a PC-based solution. This solution will deliver more initial features for recording, playback, archival, and video file transfer as well as long-term software and hardware migration paths then the technology advances.

In conjunction with the distributed servers which is the cornerstone of the software and cameras and is used to convert the cameras signals into digital files. A single server will allow the district to connect up to 32 cameras and can be linked to other servers to support hundreds of cameras. The server typically will store the video on its local hard drive but can also be configured to support network storage or other Windows based storage systems. The user interface is easy to use and has a standard Windows interface.

The District will install high resolution, low light, color CCD fixed and pan-tilt-zoom cameras at strategic locations throughout the various campuses. Understanding that the college environment is not conducive to widespread coverage, strategic locations where cameras will assist in the safety and protection of the employees, students, and visitors are recommended. These areas include parking lots, outdoor recreational areas, money handling areas (i.e. cashier, emergency call boxes, and areas of high potential loss due to theft or vandalism.

2.4 Security Communication System (SCS)

A SCS is a vital tool in providing long-term service and protection of District employees, students and visitors, ability use individual call stations located throughout the campuses. The system is intended to be used not only in emergency situations but also as a communication pathway to report suspicious, behavior, criminal behavior and emergencies and to request Police and/or safety escorts. The basics features of the SCS are as follows:

- The call station is a wall mounted or freestanding bollard style unit that is ADA compliant.
- Dials a pre-programmed number. Even if the person is unable to communicate, the location of the unit is transmitted to the receiving station. (handheld radios)
- The call station has a blue area light, which serves to identify the unit from great distances and a blue strobe light beacon, which flashes when a call is placed. A concealed fluorescent light illuminates the speakerphone faceplate to facilitate locating and using the push button.
- The call station will communicate via the existing telephone network and/or wireless and infrastructure at the campuses. Because the SCS will serve as both as an emergency notification system and as a public service system for employees, students and visitors, it is crucially important that the call station be monitored 24 hours a day, 7 days a week, year-round.
- The best location for the central monitoring point of the SCS is within the Yuba Community College District Police Department.

2.5 Prioritization

YCCDPD and Information Technologies recommend that the security requirements reviewed above be implemented in the order presented. While the backbone for the ACAMS and the IP digital cameras system are currently under contract, or soon to be under contract, capturing the full benefits of both systems will require that the YCCDPD office be relocated on the Yuba College Campus and increased staffing of the YCCDPD.

SECTION 3.0 NEW BUILDING CONSTRUCTION

3.1 General

New building construction provides an excellent opportunity for the implementation of campus security systems. Historically, new buildings have been equipped with burglar alarm systems that report to various third party monitoring stations. Keypads included as part of these systems were used to arm and disarm the building. YCCDPD recommends that use of the control keypads continues but with the migration of security alarm point field devices reporting to the ACAMS rather than burglar panels. The intent is to provide the District with security systems that can be managed more effectively and economically. The ACAMS will provide a more secure environment for employees, students and visitors, and increase the ease with which individuals move on and through the campus. The ACAMS will also reduce the risk from theft and vandalism, thereby potentially reducing the risk of negative publicity caused by crime.

3.2 ACAMS Criteria

- A. Install ACAMS control panels and ancillary equipment to serve as interface and control points for access control and alarm monitoring devices in the new building. Typically, the ACAMS controllers will be installed in telephone/data rooms and will be connected to and configured on a secure VLAN across the District IP system.
- B. Equip main building entrances with ACAMS card reader/keypad units, door alarm contacts, electronic locking hardware and request-to-exit devices. (Card reader/keypads will be utilized for access control and alarm zone arming and disarming.)
- C. Equip door alarm contacts on all perimeter doors that are not associated with a card reader/keypads.
- D. Install access-controlled doors with card readers to secure all telecommunication/data rooms.
- E. Install access-controlled doors with card readers to secure all doors to the Police Department.

F. Install access-controlled doors with card readers to secure internal areas that house any of the following physical items:

1. Cash.
2. Equipment of high dollar value.
3. Potentially dangerous equipment.
4. Hazardous equipment.
5. Items that present an attractive nuisance.
6. Laboratory equipment and chemicals.

(Note: Internal areas that will also be equipped with non-door related security devices or with doors equipped with alarm contacts only will require a card reader/keypad for internal alarm arming and disarming functionality.)

G. Install access-controlled doors with card readers to secure internal areas that house any of the following data service and document items:

1. Police Department.
2. Campus computer network equipment and infrastructure.
3. Human Resources records.
4. Accounts Receivable records.
5. Sensitive information that could be potentially damaging to the District if made public.

(Note: Internal areas that will also be equipped with non-door related security devices or with doors equipped with alarm contacts only will require a card reader/keypad for internal alarm arming and disarming functionality.)

H. Provide door alarm contacts on perimeter and service doors that are not card reader controlled entrance points.

I. Provide alarm notification devices (robbery buttons) at locations where money is handled.

J. Provide security alarm devices (motion detectors, glass break detectors, etc) in interior rooms and/or areas that house any of the following items:

1. Cash.
2. Equipment of high dollar value.
3. Potentially dangerous equipment.

4. Hazardous equipment.
5. Items that present an attractive nuisance.
6. Laboratory equipment and chemicals.
7. Campus computer network equipment and infrastructure.
8. Sensitive information that could be potentially damaging to the District if made public.

(Note: These types of devices are only necessary in locations that have multiple entrances and/or methods of access.)

9. Police Department.
- K. Provide door alarm contacts on all electrical room and closet doors.
- L. Provide Cyber locks on doors where criteria are not sufficiently met to justify incorporation of card readers but where a level of security greater than mechanical keys is desired.

3.3 IP Camera Criteria

- A. Install IP Digital color cameras and servers in the new buildings. Typically, will be installed in IT/telephone/data rooms and will be connected to and configured on a secure VLAN across the District IP system.
- B. Equip internal areas that house any of the following physical items with high resolution color IP Digital cameras:
 - a. Cash.
 - b. Equipment of high dollar value.
 - c. Potentially dangerous equipment.
- C. Equip internal areas where cash and/or records transactions occur with high-resolution IP cameras to view and record interactions.
- D. Equip major building entrances with high-resolution color IP cameras.

SECTION 4.0 PARKING REQUIREMENTS

4.1 General

4.2 IP Camera Criteria

- A. Install server in a secure room nearest the parking lot(s).

- B. Install high-resolution color IP cameras to view the entrance and exit lanes of the lots.
- B. Install freestanding bollard style call stations in parking lots at approximately 300' intervals. Size, location and use specific parking lots will determine the specific quantity and placement of the call stations.
- C. Call stations will be terminated to the Police Department.

SECTION 5.0 CONCLUSION

The SMP has provided a criteria based system for the inclusion of physical and electronic security systems for new and existing buildings as well as parking facilities and general site areas throughout the District. The heart of these systems will reside in the new District Police Station located on the Yuba College Campus.

They include the following:

- The Access Control and Alarm Monitoring System (ACAMS), comprised of access control card readers and alarm system field devices, which will allow the District to effectively control and monitor campus and building activity.
- The IP camera system comprised of distributed servers and high-resolution IP color cameras, which will allow District Police to monitor events at select locations throughout the District.
- The Security Communication System, comprised of security call stations utilizing the existing District telephone infrastructure, which will allow employees, students and visitors to report crime and/or suspicious activity, call for assistance and/or escorts, and assist the District Police in demonstrating that the District campuses are safe environments.

Appendix A

Appendix B – Glossary of Terms

ACAMS	Access Control and Alarm Monitoring System
ADA	American’s with Disabilities Act
Department	Yuba Community College District Police Department
District	Yuba Community College District
SCDC	Security Command/Dispatch Center
SCS	Security Communications System
SMP	Security Master Plan