



Designing and Implementing Low-Cost, High-Impact Solutions for Safety and Security

Mike McCullar, Executive Director, Construction & Planning

Joe McKenna, Director of Safety and Security

Comal ISD

Background and Strategy



Background – Comal ISD

- Fast-growing public school district in central Texas
 - About 23,800 students
 - Adding approximately 1,000 students a year
- 31 campuses; 2 being built
- 589 sq. miles
- Varying age, condition, and design of current facilities



Safety and Security Strategy

- From a facilities standpoint, our focus is on creating a “delay” or “barrier” for those wishing to do harm when entering our facilities.
- Main strategies are in line with CPTED:
 - Territoriality
 - Natural surveillance
 - Access control
 - Target hardening



Establishing Standards

- With our overall strategy in mind, we set out to develop standards for facilities related to safety.
- The builds consistency and uniformity not only in the actual facility itself, but also our procedures.
- This involves bring all current facilities up to these standards as well as building new facilities with these in mind.



Establishing Standards

- Once all current facilities are up to the set of standards in all areas, moving forward we can provide architects and contractors specific specs on what we need in a specific area
- Again, consistency across campus in design is critical for adopting uniform safety procedures





Major Upgrades in 2015 Bond...

- Cameras
- Vestibules
- Door handles
- Security / motion alarm
- Door access hardware
- Fencing

- Started to develop standards in these areas as upgrades were made



Areas for Improvement

- Recently conducted assessments of all campuses and found areas for improvement:
 - Perimeter/interior fencing
 - Lighting
 - Glass (visibility and hardening)
 - Access control



Projects



Lockdown Alert System

- Design
 - Use of current PA system
 - Strobe lights and buttons
 - Tied into alarm system/police dispatch
- Policy and Procedure
 - Supports efforts to empower anyone to initiate protective actions
 - Allows for procedures to be initiated from various points in the building



Lockdown Alert System



Access Control

- Several projects related to access control:
 - Classroom door locks
 - Glass hardening
 - Glass tinting/frosting
 - Vestibule door buzzer system



Classroom Door Locks

- Simple, and relatively inexpensive, but major impact
- Staff no longer have to step into the hallway and use keys to lock the door, or pull magnetic strip.



Classroom Door Locks

- The door remains locked, and closed, when occupied, which speeds up lockdown procedures.
 - This is a procedural challenge to achieve in reality
- Training, believe it or not, is key!
 - How to operate new lock must be widely shared or use will be low





Glass Tinting/Hardening

- Tinting of glass allows us to control sight lines into campus areas where students/staff might be.
- Interior frosting of glass allows us to create “safe spaces” for lockdown procedures.
- Hardening reinforces areas that are glass so that improved locks and other access control measures can be effective.





Glass Tinting/Hardening

VIDEO



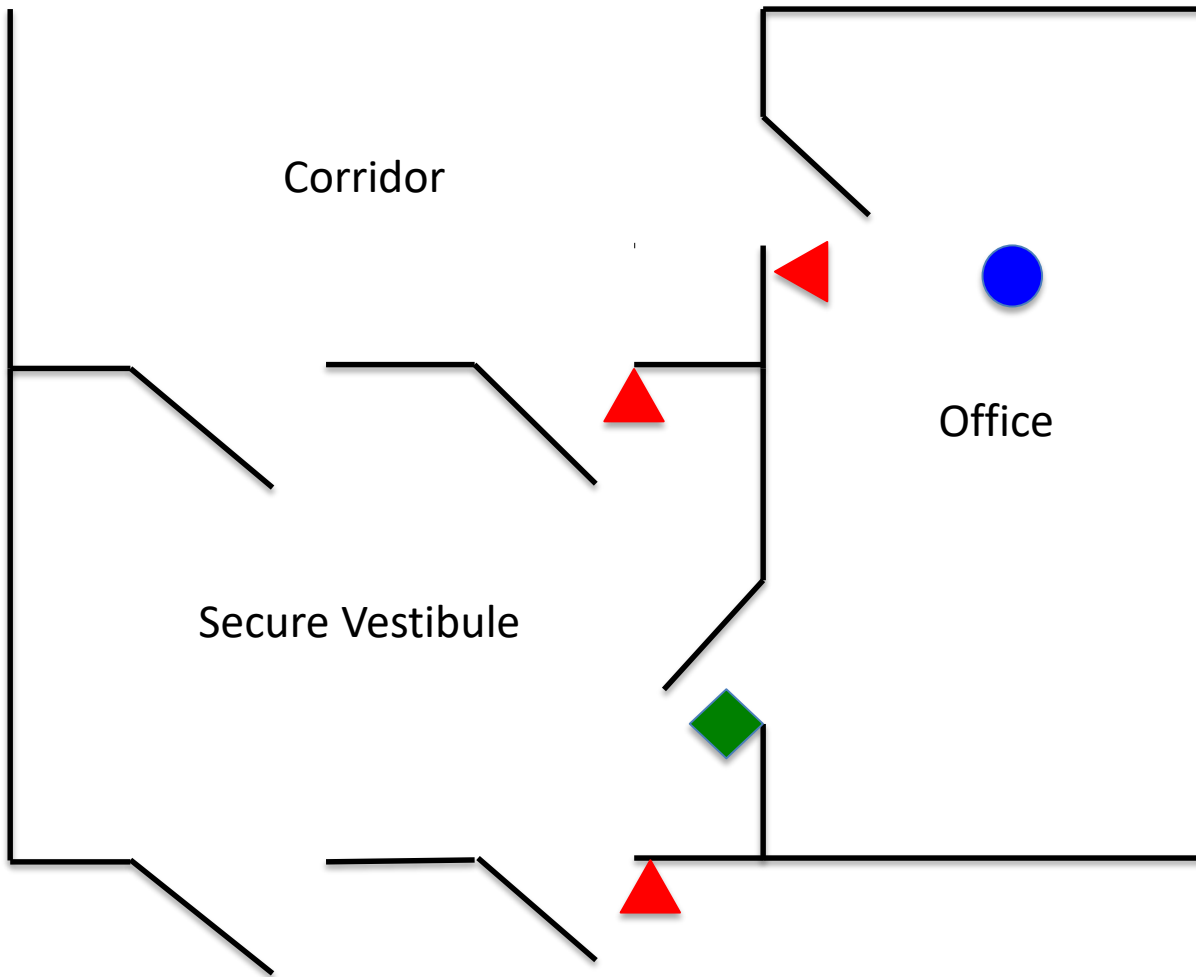


Vestibule Door Buzzer System

- Design
 - Need to control access into office as well as from the office into the campus
 - Still need to allow for direct access into campus for first responders and other staff in an emergency
 - Access cards allow for tracking and monitoring of who opened what doors and when
 - Must consider egress points



Secure Vestibule Access Control



Key



Badge Access



Control Point



Access Control



Vestibule Door Buzzer System

- Policy and Procedure
 - It does create an “inconvenience” for front office staff
 - Ensuring the system is used, and doors are not propped open are critical
 - System should create a balance between a welcoming environment for a school, but also one that can effectively control access.



Questions

