



## “Level Up” For Safer School Design

ARCHITECTURE OF A SCHOOL IS THE FIRST LEVEL OF DEFENSE

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“Level Up” is a term that I was introduced to by my children while they played video games. As they reached certain milestones in the game they would proudly announce “We LEVELED UP!”. Leveling up was, to my surprise, a great achievement in their world of fictional conflicts.

The built environment, the architecture of our schools, is the best defense against potential risks to our children. The principles of CPTED, or Crime Prevention Through Environmental Design, guides us as we consider and incorporate safety features into each unique school design. Site layouts, vehicular setbacks, building geometry, line of sight, physical barriers, and lighting are all critical components of the serious conversation about creating safe school design.

With each new school year, we are keenly aware that our schools must address school safety with a pro-active approach that continues to “Level Up” our strategies for creating safe and secure learning environments for our children.

**LEVEL ONE** School safety literally begins at the front door, or more specifically, as a person enters the site and approaches the main entrance. It’s just as important for administrators to have a panoramic view outside as it is for visitors to be able to recognize the obvious main entrance. Canopies can be reinforced and strategically placed to allow unobstructed views while providing a vehicular barricade.



**SECURITY VESTIBULE** — PROVIDE STAFF THE ABILITY TO OBSERVE ACCESS WHILE REQUIRING ALL VISITORS TO ENTER THROUGH THE ADMINISTRATIVE AREA PRIOR TO ACCESSING THE INTERIOR OF THE SCHOOL.

**LEVEL TWO** We are changing the security vestibules that we innovated in 1996. By increasing their size, introducing seating areas and controlling adjacencies with School Resource Offices, they will provide a more relevant controlled access point for all visitors. In addition, there have been significant advances in glazing protection with stronger glass laminates that offer greater security while maintaining both visibility and a welcoming first impression. Through our use of virtual reality, we allow staff and first responders to “walk through” the building, providing them a real experience of the security design, such as the building geometry and sight lines to identify areas of concern prior to the first foundation being placed in the ground!

**LEVEL THREE** With ongoing technological improvements in security, surveillance, access control and construction materials, we can now begin to “*Level Up*” additional aspects of our designs through advanced security notifications. Once a potential threat is determined, timely notification to students, staff, and first responders is crucial. Literally, seconds matter! Advanced Security Notification Technology is now available to allow staff to initiate lockdown procedures from both within and outside the school. These systems can allow immediate

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visual and audible notification to students and staff, as well as offer first responders access in real time to surveillance cameras. Visual notification can now be provided, and color coded, to specific types of threat: Blue to indicate lockdown status and Amber to alert for shelter in-place procedures in advance of potential hazardous weather conditions. These visual and audible alerts are not limited to just the interior spaces. We recommend the devices be provided at the exterior of the building, in playgrounds, parking lots, athletic fields and loading / unloading zones.

### NEXT LEVELS

Building automation can be integrated within the building to create smaller secure zones, that we refer to as “safe houses”. Existing technology, in the past dedicated to non-security related tasks such as occupancy sensors, can now provide information critical to first responders. Cellphone location data can be gathered and integrated into a graphic dashboard, to provide locations of everyone in the building.

These are just a few examples of how Sherman Carter Barnhart is designing safer schools for the students of today and tomorrow. Please call us to discuss your current facility needs. Let us help you take your school to the next level. It’s never too late to “*Level Up*”.

ADVANCED SECURITY NOTIFICATION SYSTEM –  
VISUAL AND AUDIBLE NOTIFICATION 

