Miami-Yoder Schools Scores High Marks with New Security

Introduction

Highway 94, which runs a ruler-straight path between Colorado Springs to the west and Kansas to the east, is about the only thing that breaks up the vista of lush green alfalfa fields and cattle ranches here in eastern Colorado. The town of Rush is one of several unincorporated towns that dot the highway, and is the rural home to a population of less than 750 people.

CASE SUMMARY

Location:
Rush, CO

System Installed:
American Dynamics
IP and Analog Cameras
HDVR

Kantech
EntraPass

DSC
PowerSeries alarm control panel

Located 40 miles east of Colorado Springs – the state's second most populous city, nestled at the base of the iconic Pikes Peak in the Rocky Mountains – Rush is also home to the only school building in the Miami-Yoder School District, which for years struggled with many issues relating to its remote location and the poor conditions of its facilities. The district, which serves a 500-square-mile area of three counties in this rural part of Colorado, was spending a significant percentage of its budget on busing students elsewhere to provide them with services not available at the school because of its challenging facilities, location and budgetary constraints.

Challenges

The Miami-Yoder School, serving the needs of students in pre-kindergarten through high school, was in need of a new facility to remedy some significant safety and security issues. Most notably, the district needed a building with fewer accessible entrance and exit points than its current arrangement: a mixture of a nearly 100-year-old main building and series of aging portable classrooms, some of which dated back to the 1970s, replete with leaking roofs and sagging floors. Not only were the portable classrooms cramped and in disrepair, but students were frequently required to leave the buildings and walk around the campus, which is bordered on one side by a huge cattle ranch, to reach their next class.

During one instance, the school was put into lockdown due to a shooting threat from a high school senior who was not being allowed to graduate. As a result of the multiple portable classrooms and fragmented nature of the school campus, it took law enforcement personnel more than two hours to clear the buildings and grounds. Also, due to the school's remote location, it took the responding SWAT team nearly 45 minutes to arrive at the school from nearby El Paso County.

"That was a big concern out here because of our location," said Rick Walter, Superintendent of Miami-Yoder School District. "In the event of an incident, it's very difficult for law enforcement to respond and we needed to have our own processes in place to ensure the safety of students until their arrival."

The construction of a new facility for Miami-Yoder would ensure that administrative staff could take advantage of technology that would allow school officials to control entry to the building and have access to surveillance video footage of incidents as they unfold. Administrators also wanted the security system to help manage the overall school population, controlling student and staff access to certain areas, using the system as a deterrent to ward off potential incidents like vandalism or minor assaults and as an investigative or evidentiary aid should any incidents occur on school grounds.

Solution

Thanks to Colorado's Building Excellent Schools Today or BEST program, designed to aid school districts with aging and deteriorating facilities, the town of Rush is now home to one of the newest and most technologically advanced school facilities in the state. Funded by an $18.1 million BEST grant, the new Miami-Yoder School, a 91,000-square-foot building comprised of new construction and renovated spaces, features several new classrooms for the school's approximately 300 pre-K to 12th grade students, one new and one remodeled gymnasium, and new spaces for special education, music, art and vocational

instruction in welding, woodworking and agricultural mechanics.

The school also boasts state of the art geothermal and solar powered heating and cooling systems and other technological tools, such as interactive white boards and computer labs to aid in instruction. The building is also one of the first schools in the state to be outfitted with wireless Internet.

Despite all those advancements, school administrators rank the new access control, intrusion and surveillance system from Tyco Security Products, designed and installed by Denver-based systems integrator Secure All Solutions, as perhaps the new school's most important technological improvement. Access through the building's 11 doors, including three main entrances into the elementary and middle school wings, one into the main administrative offices and several interior doors separating different areas of the school, for the first time can be controlled automatically using the EntraPass Corporate Edition access control platform from Kantech.

"Being able to finally control access to the entrances and exits of our facility was really one of the primary drivers of our construction," said Walter. "Not only does this limit access through our exterior doors, but it limits the amount of traffic roaming the hallways within our building and between the different areas of our school."

The vocational arts teacher, for example, would have access to the school's new 1,900 square foot vocational wing and its welding and metal working workshops, woodworking area and a greenhouse; and to one of the school's five computer labs, but not to the elementary wing. Likewise, facilities staff and certain administrators would be the only ones granted access to the school's physical plant, housing the new ground source pumps for heating and cooling, which along with solar photovoltaic arrays on the school's roof, are expected to reduce utility costs to less than $1 per square foot.

"For such a small, rural school, they could have kept their access control system simple and not integrated with intrusion or surveillance video," said John Castle, President of Secure All Solutions. "We were working with a blank slate on this project, and it became clear early on that they wanted a first class type of system to meet the security challenges identified at Miami-Yoder school."

Working with Secure All project manager Cory Franklin, school officials required that all doors be locked and remain secured throughout the day, with the exception of a 20-minute period each morning when students and staff arrive. Visitors, including parents, vendors and other guests, must gain access using a telephone entry system at each of the three main entrances. When the building is not occupied during non-school hours or holidays, the building remains protected and secured with DSC PowerSeries intrusion alarm panels, also integrated into the EntraPass software.

For the first time, administrators have the ability to monitor conditions within each classroom, hallway, and other common areas like the gymnasium and cafeteria and exterior areas such as parking lots using a mix of about 80 American Dynamics IP and analog cameras. Two American Dynamics HDVRs, which handle both IP and analog video feeds, are integrated into the EntraPass software, which can automatically call up a corresponding camera view of an access control event, such as a person entering a door or someone presenting an invalid badge, Castle said. The cameras are recorded to two 32-channel HDVRs, one handling

video from the north side of the building and another from the south. Video is stored for 30 days, but the school has the capability to increase that to 90 days if necessary.

The cameras are focused on the students' behavior in the classroom and not the performance of the teachers, per Colorado regulations. Surveillance footage has already aided in the resolution of several incidents, including minor vandalism, thefts of items from backpacks, disputes between teacher and student and served as an instrumental tool in an expulsion hearing.

School officials can also view video, access events and reporting and manage the system from their desks in the school's administrative offices or remotely using a web browser. This ability for remote access using Kantech's Remote Client also makes it possible to provide real-time management and surveillance capabilities to local law enforcement agencies, which are able to access the system both at a central dispatch location as well as from their patrol cars, with the ability to completely lockdown the school if necessary.

This remote access also provides conveniences when servicing the system as well. "If there is a problem, we're able to diagnose more than 85 percent of that system from our offices more than two hours away," said Castle.

"The primary focus of the BEST program was to improve safety and security, which was right down our alley," Walter said. "Even better, with our new security and environmental systems, we don't have to go outside in the snow and fall down."

One of the first new schools to come online using BEST funding, Miami-Yoder celebrated its achievement with a grand opening ceremony, featuring several local and state officials and series of essays prepared by student for the event. The writings highlighted the students' new sense of security at the school and their appreciation for the new technology at their disposal.

By employing a strategy of using state of the art technology to improve security and safety conditions and significantly reduce ongoing operational costs, Miami-Yoder School satisfied the district's goals of becoming a safe and secure environment for students, staff and the surrounding community. Now residents of the town of Rush have a local landmark of their own.