No Fence, No Problem!

Corrections and Detention Fence Replacement

By Lyle Cutler

The replacement of aging detention and corrections fencing is an arduous task met with significant planning and coordination efforts. In most cases temporary fence lines must be established, surveillance camera solutions expanded, and electronic replacement project is keeping the detainees detained. Gaps in fence lines are not acceptable. Most detention facilities do not have the staff or budget to place guards on fence lines 24/7, resulting in the installation of temporary barriers and expensive electronic security systems. Some states require additional barriers beyond inner and

regulations, an additional third barrier would be required during construction. Fortunately, the outer and inner fence lines would still be in place acting as the first and second barriers while the inner fence, being placed farther into the yard, was under construction. A third barrier was still needed. After researching different product sets and holding numerous discussions with the owners, the decision was made to allow electronic security to be the third barrier, utilizing Thermal Radar with PTZ (pan-tilt-zoom) cameras and video



Security operators will appreciate the benefits of automatic event detection inherent in Thermal Radar.

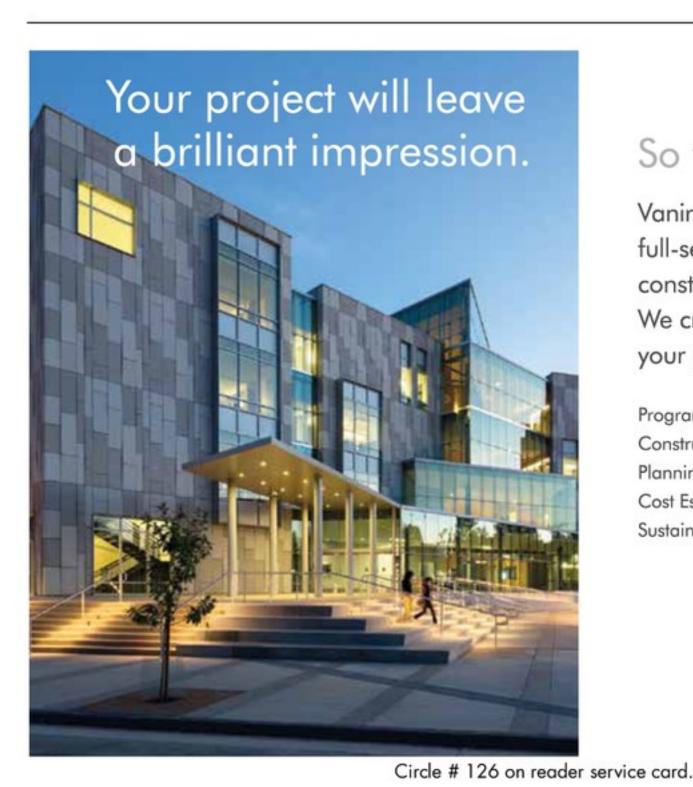
perimeter systems deployed, which may include fence shaker and microwave sensors. Fencing fabric and posts are only a portion of the final installation costs associated with fence replacement.

It goes without saying, the most important task during a fence outer fences during construction, providing additional security measures.

Dewberry recently worked with a state corrections facility in need of inner and outer fence replacement, including fence fabric and posts. Due to the size of the project and state analytics within the video surveillance system.

Heat-Sensor Detection System

Through a partnership between Vicon Industries and Thermal Imaging Radar, an electronic security solution



So will we.

Vanir is one of the nation's leading full-service program, project, and construction management firms.

We create solutions that ensure your project's success.

Program Management | Project Management
Construction Management | Scheduling | Master
Planning | Design Services | Constructability Review
Cost Estimating | Condition Assessment
Sustainability

VANII

888.912.1201 | vanir.com

is a passive
system that
does not emit
radiation and
only detects
heat signatures.

was created in the Vicon VTR series of thermal sensor cameras. Vicon Industries has been a leader in security and surveillance solutions since 1967. Thermal Imaging Radar has been producing heat signature detection options for several years. Its patented system rotates a thermal sensor 360 degrees up to 60 rotations per minute. The system is sensitive enough to detect a human over a 200-acre area. Thermal Radar is a passive system that does not emit radiation and only detects heat signatures. When a heat source is detected by the thermal radar, location information is sent to the Vicon Industries SN688 pan-tilt-zoom camera, providing automated and instant viewing of a thermal detected area. Security operators will be given the opportunity to view not only the image directly from the PTZ, but the thermal image from the Thermal Imaging Radar user interface as well. Two PoE, power over ethernet, data ports are all that's needed to communicate with and provide power to the VTR camera system.

Achieving Full Visibility

At the project site, the client was able to use the guard towers surrounding the perimeter as placement points for the thermal sensor cameras, thereby achieving full views of the fence lines. As only a 10-foot swath of area within the inner fence line was needed as a virtual barrier, masking was used within the Thermal Imaging Radar user interface to deactivate any alarms created by normal activity inside the prison yard. Since the 360-degree thermal sensor was placed at a high elevation, a blind spot is created directly below the sensor where no human

See Trade Files, page 29

Trade Files, from page 26

activity can be monitored. The blind spot was easily resolved by installing fixed IP-based surveillance cameras utilizing video analytics.

Video analytic applications within the surveillance community has expanded, enhancing automated operator control and awareness. Basic motion detection has evolved to include object removal/abandonment, people/vehicle counting, license plate recognition, people/vehicle

unnecessary data cabling, data switch ports, and installation labor. The number of camera views the security operator would be responsible for monitoring is also significantly reduced. Security operators will appreciate the benefits of automatic event detection inherent to the Thermal Radar combined with Vicon Industries' IR PTZ cameras and video analytics built into standard IP based surveillance cameras.

Lyle Cutler has spent more 25 years in the technology space designing solutions for telephone communications, door access control, PLC control, intercom, CCTV video surveillance, data networking and infrastructure, wireless data, paging, and

active shooter detection. He is a Registered Communication Distribution Designer based in Dewberry's Peoria, Ill., office.



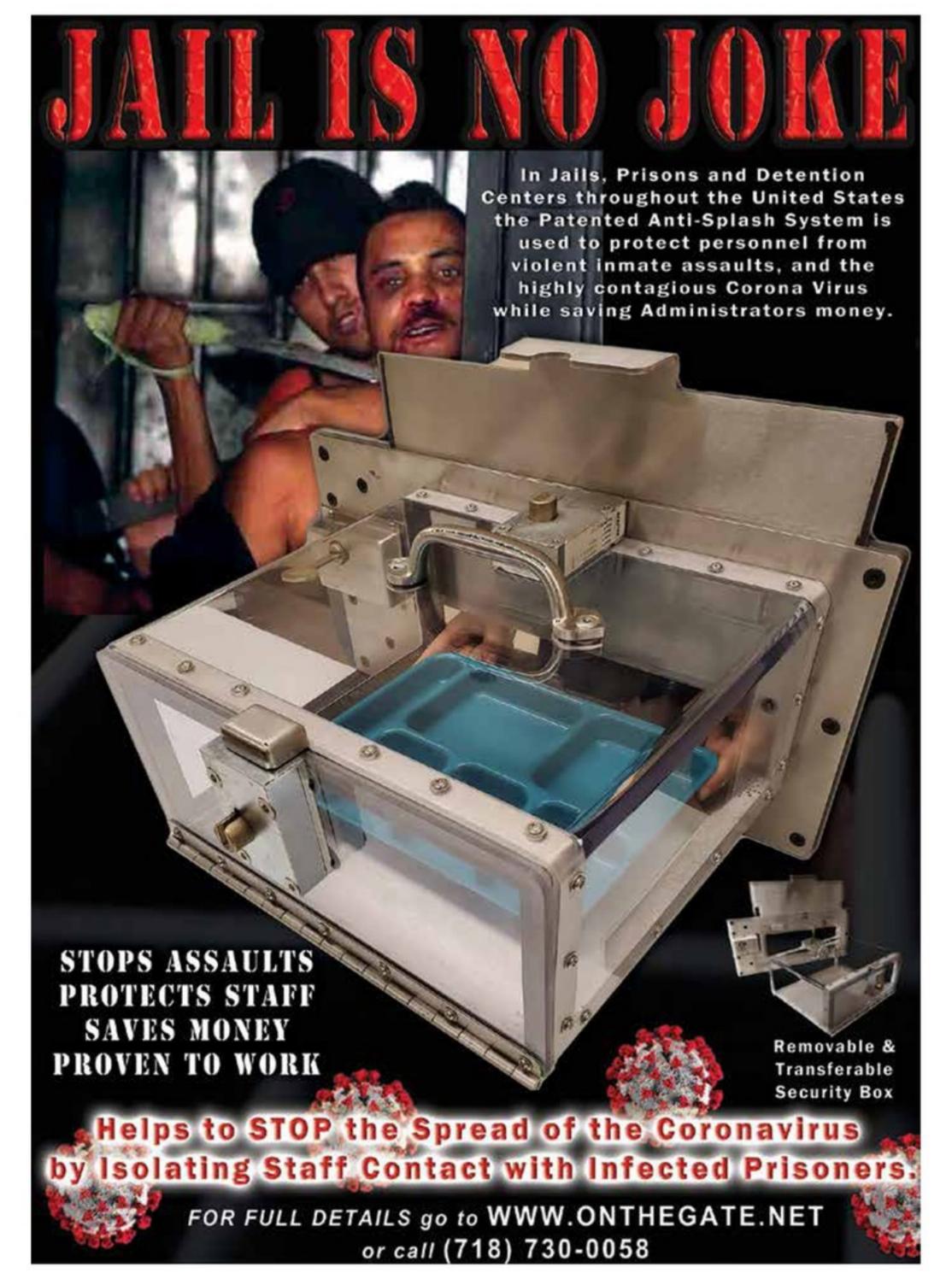


Vicon Industries has been providing security and surveillance solutions since 1967.

traffic direction, face recognition, and vehicle speed. In the case of a blind spot, surveillance cameras may be installed on the fence and guard towers and a video analytic can be used, allowing the surveillance administrator to draw a virtual line parallel to the fence, which sounds an alarm when the line is crossed. Alarms may be produced through the connectivity of Vicon Industries' Valerus video management suite, Thermal Imaging Radar's user interface, and the owner's existing PLC control system.

The application of this technology has additional benefits beyond fence replacement. Vehicles may be detected within an 1,800-acre area and fires within 20,000 acres. Entire parking lots may be monitored utilizing a single VTR series camera, potentially removing the need for watch tours. With the correct placement of this technology, entire detention yards may also be monitored in no and low light conditions.

In summary, without the use of the VTR series of thermal cameras, an exorbitant amount of IP-based cameras would be needed to cover the fence lines, resulting in costs associated with



Circle # 128 on reader service card.