

# SECURITY

## TECHNOLOGY EXECUTIVE

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The Little Caesars Arena security project team: (L-R) Richard Fenton, VP of Corporate Security for Ilitch Holdings, Inc., Jeremy Zweeres, a Principal with DVS and the main project, along with Tim Sopha, Director of Corporate Security for Ilitch Holdings.

# Elliot A. Boxerbaum Memorial Award Winner

Detroit Renaissance led by state-of-the-art Little Caesars Arena is 2018's top security project

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# Detroit Renaissance

## Led by State-of-the-art Little Caesars Arena

Security is tied to the fabric of the resurging District Detroit area that touts sports facilities, retail and entertainment venues

By Steve Lasky

Not many urban planners considered Detroit a renaissance city since the auto industry and heavy manufacturing collapsed more than 30 years ago leaving The Motor City a burnt-out shell of its former self. Today, with forward-thinking public/private partnership investment and a bold new vision of what a functional and safe urban space should look like, Detroit has reinvented itself. What once resembled a war-zone stretching from the Woodward Avenue corridor between downtown and Midtown has been transformed into a showcase featuring state-of-the-art sports facilities, entertainment venues, vibrant neighborhoods and an economic vitality that has attracted new businesses and investment with the promise of much more to come.

This reborn "District Detroit" has been the catalyst for more than 200 new development projects in the area with an estimated investment total of \$2.8 billion. The crown jewel and anchor in this revitalization success story is the Little Caesars Arena, the dazzling new home of the National Hockey League's Detroit Red Wings and the National Basketball



Association's Detroit Pistons. In the year since Little Caesars Arena opened, the award-winning venue has drawn nearly 3 million guests to the city and was awarded the prestigious Sports Facility of the Year by industry trade magazine, *SportsBusiness Journal*.

### Award-Winning Venue Meets City and DHS Security Standard

Not only has the Little Caesars Arena dazzled the sports world but it was just

as impressive to this year's panel of security professionals judging the annual Elliot A. Boxerbaum Memorial Award, which is presented to a consulting or engineering company that designed and specified a completed security design project, accepted by the client in 2017 or Q1 of 2018 and exemplifies the essence of collaboration, design excellence, uniqueness and creativity that contribute to a highly-successful security project. The winning submission came from consulting engineering firm DVS, a division of Ross & Baruzzini, for



◀ The Little Caesars Arena project was the overwhelming pick as the best security project of 2018 and winner of the Elliot A. Boxerbaum Memorial Award, which was recently presented at CONSULT 2018 in Nashville. The main security operations center in the Little Caesars Arena complex monitors all activities in and around the sports facility, the parking structures and surrounding entertainment district. It is fully integrated approach with video and unified communications.

▲ The "District Detroit" has been a catalyst for more than 200 new development projects around Little Caesars Arena, home of the NHL's Red Wings and the NBA's Pistons, along with Comerica Park, home of the Detroit Tigers. (All photos Courtesy of Olympia Development of Michigan)

the expansive Little Caesars Arena and the surrounding area referred to as “The District Detroit,” which is a 50-city block development encompassing world-class sports and entertainment facilities, six theaters and performing arts centers in addition to five neighborhoods. DVS worked alongside systems integrator Identify, Inc. and client Olympia Development of Michigan. In the area around Little Caesars Arena, more than \$18 million have been invested in the city’s infrastructure, including blocks of landscaped medians which both beautify the area and provide traffic control and security benefits.

Little Caesars Arena was a unanimous pick of the award’s selection committee for 2018 based on its intricate scope of work, flexibility to project changes, advanced technology and security solutions, maintaining a secured vision with an eye towards design and aesthetics and compliance to strict DHS-certification requirements.

The award is named for the late Elliot A. Boxerbaum, MA, CPP, CSC, founder and president of Security Risk Management Consultants, Inc. Elliot passed away in June 2014, from ALS. The presentation was made on Nov. 6, 2018, at the CONSULT Technical Security Symposium in Nashville.

### DVS Has the Goods in the Big Leagues

When it comes to playing in the big leagues, DVS has earned its pedigree. According to Jeffrey Venter, who is a Senior Principal at DVS and has been with the firm for close to three decades, Little Caesars Arena is the fourth major sports arena they have worked on. DVS has the Madison Square Garden, Barclays Arena in Brooklyn, and Conseco Fieldhouse in Indiana on their resume. Venter had also done some work with the Madison Square Garden organization out in Los Angeles when it purchased The Forum, the former home of the LA Lakers.

“But this particular project was unique since the goal was to bring Detroit back to life led by the sports facilities under the guidance of the Ilitch organization and Olympia Development (of Michigan). We worked closely with the city on a lot

**The main security operations center in the Little Caesars Arena complex monitors all activities in and around the sports facility, the parking structures and surrounding entertainment district. It is a fully integrated approach with video and unified communications.**

of different elements for this project and trying to create safe and secure zones that were characterized by vehicle-borne events. That was a major requirement for this project,” says Venter. “So, from a big-picture perspective, to create an arena with a campus that the client had control over during events, before events, after events were critical. We worked closely with the city on several different things. And they had several buildings that were abandoned, so the group, including the design team and DVS, worked to get those buildings either removed or incorporate them into the design, if you will, so that it worked from a security perspective. That was key.”

### Pistons Move to the City Helps to Ignite Massive Investments

Olympia Development of Michigan and the city of Detroit banked on the selected location of the new Little Caesars Arena connecting the downtown Detroit business districts and Midtown by revitalizing dormant tracts of property that had been impacted by Interstate 75 slicing through it. That anticipated rejuvenation has occurred thanks to the arrival of the arena and the Mike Ilitch School of Business at Wayne State University.

The symbiotic relationship that has developed between the Little Caesars facility and the now vibrant District Detroit has opened up unimaginable entertainment, business and residential possibilities that would have been impossible earlier this decade. And when the NBA’s Pistons decided to move from the suburbs to downtown Detroit and into Little Caesars Arena, other major players followed suit like Google, which opened new offices adjacent to the arena.



The expanding footprint of the business community, initiated by the arena, took the security roadmap in an entirely different and complicated direction according to Jeremy Zweeres, a Principal with DVS and the main project manager for this job. What had begun as a sports facility project had morphed into 50 city blocks of redevelopment and currently the largest of its kind taking place in an urban city environment in the United States.

“What was different from this arena from any other is that Ilitch Holdings, Olympia Development, and Olympia Entertainment really looked at this holistically not just as a singular project. This was the anchor of an entirely new project, which was the redevelopment of this new district,” says Zweeres. Along with making plans for the arena, DVS also participated in the planning to provide and develop the engineering for 25 open parking lots and five official parking structures that surround the district area, which starts from Tigers Garage 2, which is directly adjacent to Comerica Park (home of the Detroit Tigers), stretching all the way out to the opposite end of the arena.

“Not only are you providing a great place for people to come, and enjoy, and

go eat and have drinks, and share time with the family, but also providing them a safe environment for parking and how they get there,” adds Zweeres. “As part of that, we put together this holistic security design so that in any one of those parking structures or open parking lots leading up to the arena, we have close to 100 percent video surveillance coverage of the patrons. It’s really creating an overall safe environment off-site as well as on-site in order to maintain strict requirements that the client had as well as meeting all the NHL and NBA security requirements and recommendations.”

### Combining Function and Form with Dogs and Design to Earn DHS Certification

Richard Fenton, who had more than 27 years in law enforcement in Wayne County, joined Olympia Entertainment/Ilitch Holdings, Inc. as Senior Director of Corporate Security 18 years ago and is currently Vice President of Corporate Security for Ilitch Holdings, Inc. He has seen the transformation of District Detroit beginning with the building of Comerica Park, home of the American League’s Detroit Tigers and was instrumental in

securing DHS/Safety Act Certification for that facility, and also following that DHS blueprint to achieve the same certification for Little Caesars.

Fenton and the DVS team had to demonstrate and detail a threat/risk assessment analysis of the various redundant, resilient, physical and electronic security measures designed and installed to achieve the DHS designation. Little Caesars Arena became the first arena in the U.S. to earn DHS Safety Act Certification. Their Safety Act Application for the security design of Little Caesars Arena was more than 7,000 pages.

The Safety Act was enacted by Congress in 2002 and provides liability protections of “Qualified Anti-Terrorism Technologies (QATTS)” that could save lives in the event of a terrorist attack.

“The leagues have a variety of requirements related to CCTV camera technology and really get down into the weeds of looking at pixel quality, frame rate, storage, all those kinds of things, but they’re also looking at different layers. So, we’re looking at the outer perimeter and the inner perimeter and the middle perimeter and having different layers of technology that ultimately are redundant, resilient and

inter-operable,” says Fenton, explaining that not only were they required to build out an on-site command center at the arena, but also had to construct an off-site backup command center as well.”

Combining technology with unconventional variations in a traditional security measure is also a staple for the Little Caesars environment. Fenton and his team employ an advanced team of surveillance dogs that provide a more robust approach to the tried and true detection hound.

“When you’re walking up to a typical professional sports venue, you see that line of walk-through metal detectors. But if you really pay attention, you might see bomb detection dogs that are also working in the area or working part of the route. Well, there’s new bomb detection dog technology, if you will, called Vapor Wake (VWK9). In the old days when I was running the airport and had eight bomb dogs, those dogs operated under an old form of training, which was single package. You basically took the dog to the package; the dog sniffed the package and would alert or not alert.”

Fenton, who employs six of these newly-trained canines on site, explains Vapor Wake working dogs are specifically trained to detect body-worn explosives on a moving target. Unlike traditional EDD teams, which are trained to view static objects or people as their “productive area,” Vapor Wake dogs are obedient to the odor itself.

This is what enables a Vapor Wake canine to consistently and effectively do what others cannot: follow an explosive target to its source in real time while the target is in motion. Additionally, Vapor Wake dogs have been socially and environmentally raised to work in high-flow pedestrian areas enabling them to accurately screen hundreds of people passing through an entry point in a non-intrusive way.

Besides the obvious security protections that come with DHS Safety Act certification, it also frees the facilities and their principles from liabilities and litigation that may result from a terrorist attack.

“They (DHS) just wants to make sure that you have done diligence - a very high-level of security diligence - because they are becoming an insurance broker for a



The integrated technology employed in the Little Caesars project uses Avigilon as its video surveillance and access control foundation, deploying the solution in both interior and exterior locations. The Arena earned DHS SAFETY Act Certification.

terrorist event should something happen. DHS wants to know that they can go back and say, 'Yes, this particular facility, this building, whatever it is has really done a good job at every element of security.' And it's not just the design; but it's the vehicle interdiction, it's the screening of the people, it's the locations where all your different screening operations will take place. It's the security operations and staff that you have and the policies and procedures you put in place for all your different types of events," says Venter. "This isn't just hockey or basketball. They'll have many other events, in addition to the public entering the facility daily. So, there's a lot of different things that you must take into consideration. It's a big picture approach, looking at every different scenario to make sure that you have taken into the consideration today's threats as we know it, threats that historically that have occurred, and carefully ensuring that you put in mitigation or decided not to for specific reasons for every single one of those elements."

### Integrating the Systems, Ensuring Redundancy

Zweeres says the original design for the arena was always intended to provide a fully integrated and fully unified

security system, integrating access control, video surveillance, intrusion detection, and intercom that are all software interoperable.

"Whether it's a four-story building tying the intercom on-site or even one of the emergency blue phones that are 10 city blocks down the road at one of their parking structures, being able to tie that back to get video verification or an alarm back into these security operations is a key thing. Because they are a major stakeholder within the city, they also have other locations where we could act as secondary and even tertiary operation centers as a fall back. All the devices that go into the arena not only communicate within the security operations center and what we'll call the secondary command center that we have within the facility, but they can also go off-site to their district-wide command center over at the FOX (theater) and at their security operations center in Comerica Park. There's a high level of redundancy there that was built in day one," says Zweeres, whose DVS team had heard the rumors about the NBA team potentially moving into Little Caesars halfway into the project.

"The biggest challenge for us then was going back to the plans. Not only did we have to now meet NHL security

requirements and recommendations, but we had to address any of the NBA-specific requirements that they had. It didn't necessarily impact the headend of the security system. It certainly did impact how we looked at certain areas for video surveillance coverage. Not only did we have to have video surveillance coverage back of the house for the Pistons players, but we also now needed to consider the bench positioning. The NBA has strict requirements of video surveillance all the way down to the pixel densities that they have in front of the bench, and back of the bench and at an entry point. They are detailed when it comes to the recommendations on the recording side as well."

### Specifying the Right Technology

When it came to specifying technology into the project, DVS partnered closely with lead systems integration provider, Identify, Inc. out of Madison Heights, Mich. Robert Suszynski, Identify's President, admits his company already had a track record with complex facilities in the casino industry and the Comerica Stadium project when they were approached by DVS for Little Caesars. It didn't hurt that Identify was also the integrator of choice for the Little Caesars pizza franchises in greater Detroit.

"Our customer is already an Avigilon user so that was the primary product for the video. Access control-wise, they were on a different platform and decided to go with Avigilon's ACM, so they're in the process of converting a different system to ACM. So, all the new buildings are getting Avigilon's ACM and they're starting to convert other facilities as well to that platform," says Suszynski, who also adds that Stentofon was used as the intercom systems provider and DSC for intrusion detection. "Jeremy was instrumental in making sure that there was good coordination between the customers and the manufacturers and the integrator. He already knew they wanted the Avigilon because it's what they currently used, but I think he brought some other product mixes to the table, like Stentofon. When we had the first project with one of the garages going up during the arena construction, it turned

out just fine. We thought the sound quality of that intercom system was amazing because those intercoms are also used for their blue-phone station."

Fenton was also impressed with the apparent seamless effort both DVS and Identify pulled together the technology package on the arena itself along with the perimeter's exterior solutions that encase the facility.

"One of the great things that DVS was able to do was bring vendors to the table, if you will, demonstrating that integration plan was already there. I'm not plugging one vendor over another, but I'll give you an example. Avigilon, which is a major camera and CCTV platform, also has an integration with their access control system. We've learned that not all access control systems seamlessly mesh with the CCTV system," Fenton admits, adding that vendors like RGB Spectrum (video wall) Mercury (access control panels), HID (access card readers), Morpho (biometric finger readers), Life Safety Power (power supplies), Winsted (security room consoles) StoneLock (facial readers), Raytec (IR illuminators) and NEC (facial recognition) all contributed to the sophisticated interoperability of the system.

While DVS and the architects were creating an aesthetically-pleasing structure, it was Fenton's job to work with his consultants and integrators to forge the security foundation both inside and outside the facility.

"I think sometimes security consultants are so tied to the architect, and the architect has his vision that security gets treated as an afterthought. But this project was just another example of the phenomenal support that we had from our ownership and from our CEO, Chris Ilitch. Everybody wants a beautiful building, right? But I want it to be a beautiful building that is safe and secure." Fenton says. "Our ownership and our CEO and president said, 'Look, this building's going to be here for 25 years. And we want it to be beautiful, but we want our employees, we want our professional athletes, we want our concert artists, we want them all to be safe and secure, and that's our number one consideration.' There's not a lot of owners and CEOs that take that approach."

Fenton says management proved security was priority one when it decided to offset the parking garage from the arena itself to create a ballistic buffer to the venue. Doing that cost them more than \$10 million a year in parking concessions.

### Status Quo is Not an Option

The distinction of the DHS Safety Act certification also requires that both Fenton and DVS continually strive for solutions that will keep their clients safe and secure. It's a five-year certification, so DVS has developed a five-year plan to address tomorrow's threats.



"At the end of the day, bad guys are always thinking of different ways to hit you. If you and I were having this conversation six to eight years ago, we would be talking about complex attacks, we would be talking about pre-operations surveillance, we would be talking about things much different than the guy going down to the corner rental place, renting a truck and vehicle-ramming and running over people. The Safety Act actually requires you to look at the changing landscape and to continuously improve," Fenton says.

"DVS was outstanding to work with because they were collaborators. You've got to get involved with a security consultant that wants to collaborate as opposed to dictate. And what I really liked with DVS is how open Jeremy Zweeres was to sitting down and being part of these collaborative meetings where we had this cross-section

of fire, police and federal officials. He really got into the weeds with them and took their ideas and then would come back with recommendations the whole group could consider as part of a comprehensive security program."

Zweeres concurs that collaboration was the fabric of this successful project.

"I think the stars aligned on this project where you had a really great client who had a vision, they carried through with that vision, they knew exactly what they wanted up front. Then we as security consultants worked with clients, worked with architects, worked with landscape

An off-site secondary command center at the FOX Theater offers a high level of security and systems redundancy that was planned for beginning day one according to the project team.

designers who all understood that the pieces aren't just about cameras and card readers," concludes Zweeres. "We were also fortunate enough to have a really great security integrator on the project who provided a good product that was specified and ultimately installed." ■