

Cermak's Comeback

New canopy lighting powered by artsy wind turbines has helped boost the fortunes of an iconic but aging 1950s' strip mall

BY PAUL TARRICONE



If the 55-year-old Cermak Plaza shopping center were an actor, its career path would mirror that of dozens of performers of the same age. First were the early years of glory, during the height of America's suburban shopping mall construction boom. That's followed by Cermak's mid-career phase marked by steady success and a few cameo appearances in Hollywood movies such as *Wayne's World* and Angelina Jolie's *Wanted*. Then, inevitably the decline, as a fading star begins showing its age. Finally, there is the renaissance, which results not from selecting better roles (think Mickey Rourke or Eddie Murphy) but from that other Hollywood stand-by—the facelift. Or, in the case of Cermak Plaza, the *façade-lift*.

Faced with intense local competition and the bankruptcy and loss of an anchor store, the 300,000-sq ft strip mall in Berwyn, IL, outside of Chicago was operating at an all-time low occupancy rate of just 40 percent in 2008. Hoping for a return to glory, developer Concordia Realty Corp. proposed using artwork as a means for re-energizing Cermak. "We wanted a new, fresh, exciting building that incorporated public art and would reinvent the plaza," says Michael Flight, president of Concordia Realty Corp. "The original developer was focused on unique art that utilized light, color and motion so we wanted to carry that through into the renovation."

Architect Ethos Workshop, Naperville, IL, took that strategy a step further. "We asked the question: Why can't we make the property an art piece in itself?" says Scott Allman. "That's when we started conceptualizing how to use lighting in an innovative and artistic way that would add to the consumer experience while giving the property greater visibility from passing automobiles."

The design team's concept called for a dramatic new illuminated canopy to run above the stores, along with new lighted towers at either end of the strip mall. The drama is created not only by light but by wind...or to be more accurate, light *from* wind: The LED luminaires (Lumenpulse) used for the façade lighting are powered by 12 wind turbines positioned along the edge of the shopping center's parking lot. The wind-powered luminaires, in effect, make a green lighting system greener, while the spire-like turbines add some aesthetic pop.

FIXTURES IN THE CANOPY

The canopy has a steel metal deck roof with perforated aluminum panels on the underside. Lighting it presented a number of challenges. The luminaires needed to be mounted in tight spaces, deliver striking controllable colored light and require minimal maintenance but be easily accessible should maintenance be

Photo: Miller+Miller



The luminaires are mounted inside the canopy, along the bottom edge. The canopy lighting changes colors, while the tower lighting (far left, above Party City) remains white. The objective was to use light to enhance the onsite customer experience and attract drivers passing by.

necessary. Further the system needed to perform flawlessly during cold Illinois winters.

LEDs were the only source considered by the design team, says Allman. Convincing the owner, however, was another matter, due to the perception of higher cost and the risk in using a newer, unproven technology. "When we started the project in 2008, the technology wasn't where it is now; LEDs didn't have much of a track record in applications like this," says Flight. "We didn't want to get into a fad, where the technology would become obsolete. We needed convincing that LEDs were going to work and deliver what was proposed. But then we saw a demo of the Lumenpulse product, and examples of other installations. The longevity of the fixtures was convincing and the cost/benefit ratio worked."

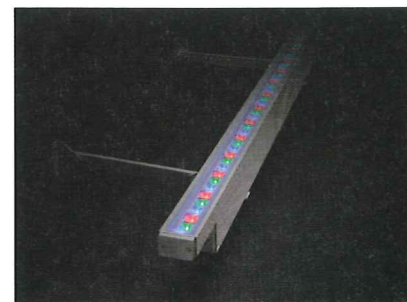
The small footprint of the luminaires enabled them to be mounted within the cavity of the canopy, and by performing well in temperatures as low as -25C/-13F, the extreme winter weather did not pose a problem. Color-changing light

is used for the canopy; the towers on either end of the strip mall are illuminated by white light only.

WHY WIND?

The 35-ft tall wind turbines that power the luminaires generate 1,500 to 2,500 kilowatt hours of electricity each year, although there have been issues with reliability and downtime, says Flight. During the day, when the LED fixtures are off, unused power is directed back to the grid, earning rebates for Cermak Plaza Associates LLC, which also received a federal credit for installing green technology.

What's more, the turbines make an artistic statement in their own right. "We chose the turbines because their elegant profile would be complementary to the new façade and the existing art work. The artwork was installed by David W. Bermant, whose charitable foundation is the David W. Bermant Foundation for Color, Light and Motion. The turbines fit with [the late] Mr. Bermant's art passions," says



The Lumenpulse luminaires were preprogrammed with more than 100 different light shows, which can run for an entire year at the push of a button.

Photo: Ethos Workshop



Spire-like wind turbines surround the perimeter of the parking lot and supply electricity to the LED luminaires on the canopy. The turbines offer artistic form and function, but added less than 1 percent to the project cost.



Flight. "The turbines' motion in the sunlight and reflecting of the lights at night really make an impact—along with generating electricity."

The added cost for the turbines was minimal—less than 1 percent of the complete redevelopment project, says Flight. Concordia Realty also conducted an ROI analysis to calculate the cost savings in electricity vs. the cost of the turbines. "The payback was supposed to be eight years which also included some State of Illinois grants that never happened. With the tax deductions and the fact that the turbines do not generate as much energy as projected, it will probably be 12 years or more for a return on investment. It is not the most efficient way to generate electricity but we also had aesthetic reasons for liking the turbines."

KSA Lighting pre-programmed the system with more than 100 unique light shows, which vary from default color-changing sequences to themed displays for seasons and holidays. Control of the system can be completely hands-off with pre-programmed shows running for the whole year at the push of a button. In addition, a Lumentouch (Lumenpulse) keypad is located on the premises, allowing the building owners access to the control options through a DMX interface so they can override existing shows

whenever they want. The light source projects to an L_{70} lifetime of 120,000 hours, while drivers can be replaced without having to replace the entire fixture.

On the retail side, Cermak is now 98 percent leased. Comeback complete. ■

METRICS THAT MATTER

Cermak Plaza

Lamp Types: 1

Fixture Types: 2

Total Number of Fixtures: 76

Wind Turbines: 12

Estimated Payback Period for Turbines Due to Energy

Savings: 12 years

THE DESIGNER



Scott P. Allman, AIA, SCDP, is president of Ethos Workshop Architect and Planners.