



LIGHT-BULB MOMENT

Shedding new light on existing sports facilities

By Mary Helen Sprecher

Adding lighting to sports facilities brings a raft of advantages. It increases patron safety and allows facilities (fields, courts, or any other structure) to host more hours of play, particularly after school or work.

Lighting also increases the overall appeal of facilities, allowing them to become go-to sites for tournaments, championships, and big games, as well as for leagues, camps, and other programs.

But, as the saying goes, for every action, there is an equal and opposite reaction, and in this case, that reaction can come in the form of questions and concerns from nearby neighbors.

“There are always challenges when designing outdoor-lighting systems nestled within residential neighborhoods. Those challenges also differ based on the project scope,” says Jordan Barker of Spartan Sports Lighting.

In today’s landlocked society, moving facilities away from houses is not an option, so how can parks help address concerns and head problems off at the pass?

— GLOW AND SPILL —

The most important strategy, according to industry professionals, is one of complete transparency. Maintain open communication with local neighborhood associations.





Discuss which upgrades will be added to which facilities, the timeline for those upgrades, and, of course, any disruptions residents can expect, such as work vehicles in the area.

Remember that leaders may also be forced to field unanticipated questions, such as the impact of lighting on local wildlife. In this specific case, commissioning an environmental survey in advance will be helpful.

Concerns about sports lighting generally cover two factors: glow (the light that projects upwards from a lighted sports facility, and spill (also known as trespass), which is the light that extends beyond the boundaries of the facility. These issues are more problematic with older lighting systems (which also result in higher electrical bills), say lighting contractors.

“The LED lighting products for sports applications on the market today are more energy-efficient [and] have improved light control with better optics and shielding,” says Mike Burcham of LSI Lighting. “LEDs are more reliable, have a longer lamp life, and are instant on/off.”

Another advantage of newer systems is their increased functionality. Some may be controlled from off-site via a mobile app that is accessible to a park manager or facility manager. Lights can also be set to turn on and off at certain times, and to be dimmed when not in use. Additionally, systems can be linked to motion sensors, lowering the potential for trespassers and vandalism.

NO EASY FIX

Some facilities may already have lighting; however, those fixtures may be old and cause problems, such as glow and spill. In that case, say lighting experts, there are more strategies to use, such as reuse of existing poles. However, it is not always as easy as swapping out fixtures.

“The most common issue when retrofitting existing poles is the lower mounting heights,” says Barker. “Old ballast technology did not have any way of directing the light being emitted and was designed in a way that used more poles, at lower heights, emitting light in the general direction of the field of play. Ideally, it is best to replace poles as opposed to retrofitting, but budgetary constraints should be considered as well.”





directly to the existing fencing structure between nine and 10 feet in height. They allow for installation almost anywhere with light height and spillage at a cost savings, with no structural permitting required when installed on existing fencing.”

The main caution mentioned by many lighting professionals is the importance of purchasing sports-

And, says Nick Schultz of Tweener Lighting Systems, the layout of the existing facility may limit the potential for change.

“Often, it isn’t possible to install new footers at recommended light-pole locations due to infrastructure or landscaping surrounding facilities, like courts. Also, more environmental restrictions are being enforced every year, making it increasingly difficult to meet light height/spillage requirements, dark sky ordinances, etc., while also lighting a facility properly.”

Thankfully, he adds, the technology is evolving as well, allowing parks to find a way around the problem.

“One of the leading trends in sports lighting for outdoor facilities is the implementation of linear, fence-mounted LED lighting systems; these can be installed

specific lighting from a reputable vendor. While pop-up ads online tout incredibly inexpensive fixtures, many are manufactured and shipped from outside the U.S. and do not include customer support in case of malfunctions or system failures.

“Lighting should not be viewed as an expense,” says Burcham. “When it is, far too often, the low-upfront-cost solution is selected and leads to multiple issues later, including poor player experience with bad lighting and/or glare, excess spill light due to poor lighting control, wasted energy, and increased maintenance cost for unreliable products. The proper lighting with adequate controls can be a revenue generator for many facilities. You can create a place people want to play, and this can create revenue opportunities.”



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Working with a vendor who can provide not only installation but also maintenance, troubleshooting, and other support is invaluable.

“There are endless options on the market,” Burcham says. Seek the guidance of a lighting professional who understands sports lighting, and buy from a manufacturer who has decades of experience in the sports-lighting industry. Do some research and see if paying more upfront maximizes the experience at a facility and ultimately generates more revenue.

Of course, any change, even for the better, is likely to raise questions, adds Barker.

“If new lighting is being added into an existing neighborhood, it will be noticeable for no other reason than perception and change. From a design perspective, the adverse effects of adding lighting can be mitigated by manipulating pole locations, mounting heights, and taking obtrusive light as a whole into account. If designed correctly, adverse effects should be minimal, if they exist at all.” **PRB+**

Mary Helen Sprecher is the technical writer for the *American Sports Builders Association (ASBA)*, and also the editor of two of ASBA’s publications, *Sports Fields: Construction and Maintenance Manual* and *Courts & Recreational Surfaces: Construction and Maintenance Manual*.



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