Project Summary

Central City Parking Lot







Location: Spokane, Washington

Client: Spokane Public Facilities District (SPFD)

Client website: spokanepfd.com

Lighting Agent: Cascade Lighting (cascadelighting.com)

Lighting Engineers: MW Engineering (mwengineers.com)

Lighting Design: Escent Lighting (escent-ltg.com)

Products Used: Carmanah EverGEN™ 1530 solar LED parking lot lights

- 17 systems
- Coverage area: 400ft x 300ft
- Mounting height: 24 ft
- Minimum: 0.2 fc
- Avg/min ratio: 2.4
- Operating Profile: Split Night, 5hr, 25%, 2hr: The light comes on at dusk at full intensity for five hours, then dims to 25% of full intensity, then returns to full intensity two hours before dawn.

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Overview: When the Spokane Public Facilities District (SPFD) began to look for lighting alternatives for a new parking lot facility in the downtown core, solar LED lights were top of mind. The central location of the parking lot, in combination with its proximity to the INB Performing Arts Center, a major new facility in town, gave the SPFD the perfect opportunity to showcase its continued movement towards renewable energy alternatives.

Requirements: The SPFD, which operates the Spokane Veterans Memorial Arena, Spokane Convention Center, and INB Performing Arts Center, adopted a Sustainability Policy for all of its venues. The policy mandates that all the district's venues operate in an environmentally friendly manner and take every available opportunity to reduce waste by conserving essential resources, recycling and using recycled materials, and utilizing renewable energy sources whenever possible.

The district sought the help of lighting experts Escent Lighting and MW Consulting Engineers to find a renewable energy alternative for their parking lot lights that would suit their needs and the lighting performance requirements of the site. With the help of authorized Carmanah lighting agent Cascade Lighting, the EverGEN[™] solar LED light by Carmanah Technologies was proposed.

Since the installation would represent the first LED site lighting in the city (not to mention the first solar outdoor lighting installation), performance and reliability of the chosen solution was key. During the bid process, the district evaluated the options for solar LED lighting systems carefully.

Light output that met IES standards along with proven reliability of the lighting systems were key considerations. Manufacturer experience and availability of support was also important. In addition, portability played a role: the SPFD sought a viable long-term lighting solution that could be moved and placed in a different location as the district grew and site requirements changed.

Our solution: After extensive evaluation, the Carmanah EverGEN 1530 rose to the top of the options. Carmanah's extensive experience in solar LED technology gave the SPFD confidence in the manufacturer's expertise and support, allowing the EverGEN solution to shine. Additionally, the systems provided a robust and reliable solution for parking lot lights that met the high light output requirements of the site. Without the need for trenching or electrical grid connections, the Carmanah outdoor solar lights could also be picked up and moved to accommodate the SPFD's changing needs.

Featuring dark-sky friendly BetaLED LEDway fixtures, the lights will also help the city reduce light pollution. With a lifespan of 100,000 hours, the LED fixtures will virtually eliminate bulb changes at the site. When combined with the solar-powered technology of the lights, the LED fixtures will also allow the city to significantly reduce maintenance costs for the lights and eliminate electricity costs for illuminating the parking lot altogether.

Kevin Twohig, Executive Director of the SPFD, couldn't be happier with the lighting selection. "As a district, we have adopted practices and procedures that actualize our Sustainability Policy. We are constantly looking for ways to better improve our venues in environmentally friendly ways, and selecting solar LED lighting for the new parking lot facility was both logical and environmental."

Jeremy van Lith of MW Consulting Engineers said of the project, "We at Escent Lighting and MW Consulting Engineers were thrilled to be an integral part in helping achieve the Spokane Public Facilities District's commitment to promote sustainability in our community via the South Convention Center Parking Lot Solar Lighting Project. By applying our experience and continuing education regarding new technologies like the EverGEN Series systems, we were able to successfully create a lighting design that not only met, but exceeded the Owner's expectations."

