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www.ies.org December 2022 LD+A **27**



While circumstances and schedules evolved over the project's two-year timeline, the surrounding red-rock landscape, highlighted by Phoenix's striking desert sun, did not. Those tell-tale elements of the Arizonian landscape are woven into the new design, connecting the arena with its local roots, while also creating a modern asset for the community. "The lighting adds another layer to the architect's concept, which references the unique Sedona rock foundations and the wonderful quality of light associated with the desert," explains Lu Huang, senior designer, Electrolight. "We created a journey that leads the spectator to follow the 'canyon path,' represented by the atrium, to the 'valley' of the basketball court."

To create the canyon journey, the atrium is flanked with an arrangement of vertical LED strips that illuminate the adjacent wall paneling, revealing the texture and tone of the material, as well as the geometry of the space. "We specified Ecosense Slim Cove Dim for the vertical LED strip in the canyon," Huang says. "This line-voltage fixture eliminated [the need to use] a remote driver, allowing for a longer continuous LED run, and simplified installation and coordination."

Electrolight selected a CCT of 4000K for the vertical fixtures, which blends with the daylight that enters from the glazing façade. The downlight layout was also designed to match the shape of the pavilion plan, so that the fixtures in the atrium "con-

Visible through glazing, interior atrium fixtures match the shape of the pavilion, contouring the building's qeometry.



tour the building," Huang says, especially when viewed from the exterior through the glass walls.

Clubs and private suites lining the basketball court allude to small caves surrounding the valley, furthering the overall theme. Indirect lighting in these spaces mimics the light traveling through gaps into a cave, hinting that there is more to explore on the upper levels. "We used a lot of LED tape and aluminum-extrusion combinations from Kelvix at many places where we had limited real estate to work with," Huang explains. "We set the CCT in the clubs and suites at 2700K, much lower than the CCT at the pavilion and the concourse. This strategy helps tells the story of the journey traveling through the valley to the cave, turning the

28 LD+A December 2022 www.ies.org





atmosphere into a more intimate and private setting." Handrail lighting (ETi Lighting) helps achieve safe light levels at stair locations in the suites and clubs, while the rest of the space remains dim. "The 2700K light not only illuminates but also gives warmth to the stairs," Huang adds.

Additional lighting concealed in screens and mesh, as well as select custom pieces, add visual interest. The centerpiece of the Annexus Social Club, for example, is a 15-ft tall custom light sculpture. "We designed strings of light tubes (SPI Lighting) that look like light beams dropping down from the ceiling interlaced between the brass tube sculpture," Huang explains. "It creates a dynamic in the space—and it's one of the most special installations we have ever created in our practice."

Left: Suspended luminaires interlaced with brass tubes form the VIP club's 15-ft tall custom light sculpture.

Right: Handrail fixtures guide users upstairs, where cove lights through mesh drapery mimic illumination leaking into a cave. A monumental video wall also projects colors into the Annexus Social Club. The color of downlights in the space changes based on the media content on the wall, creating an immersive and dynamic experience for guests.

Themed bars and concession areas are located above the valley on the upper levels. "The frontier saloon is the central theme in this area," Huang says. "Leather, copper and lots of rusty materials fill the interior." The lighting scheme renders and enhances the materiality of hardware and finishes to finalize the whimsical, gold-rush-era vibe.

Electrolight was also tasked with designing a flat pendant for the space above the wide bar counter. The team collaborated with Eleek, a custom light-

www.ies.org December 2022 LD+A **29**



At A Glance

- The project earned a 2022 IES Illumination Award of Merit.
- Light levels range from 5-15 fc in the lounges and clubs to 35 fc in the pavilion.
- Energy levels comply with ASHRAE/IES 90.1-2007.

ing manufacturer in Oregon, to create two pieces. "The copper finishes with the 2700K CCT pendant lights are the best companions for the leather saddle stools," Huang explains.

Ourt lighting was designed by Musco Lighting, while the project's electrical engineer, AEI, specified a lighting control system by nLight, which utilizes a mix of DMX, 0-10-V and phase dimming. "We designed the lighting to deliver 35 footcandles in the pavilion; 15 fc at the main concourse; 10 fc at secondary circulation; and 5-15 fc in the lounges and clubs," Huang says, adding that the local health department requires a minimum of 35 fc at all food and beverage service counters.

A color temperature of 2700K best complements the suede bar skirts and saddle stools in the rodeo-themed bar.

The project was broken into three phases to allow the Suns to have home games during the renovation process. "The design and construction were staggered with each other; therefore, the team was constantly developing the design while solving field-conflict issues simultaneously," Ramos says. "Implementing new document-sharing technology made the coordination process quicker and reduced site-visit travels, which helped reduce the carbon footprint of this project."

The resulting building infrastructure upgrades, combined with new and enhanced amenities, make the desert dream a reality—for players and fans alike.

Output

Description:

THE DESIGNERS | Claudio Ramos, IALD, CLD, is the director of Electrolight, San Francisco.

Lu Huang, Associate IALD, is a senior designer with Electrolight.

Burak Yilmaz, Associate IALD, is an associate designer with Electrolight.

30 LD+A December 2022 www.ies.org