

City of Los Angeles Engineer Julie Allen, PE: Making a Distinct Impression



Julie Allen, PE (City of Los Angeles Engineer), Photos © John Livzey, 2017

Queen Elizabeth II said, “At its heart, engineering is about using science to find creative, practical solutions. It is a noble profession.” Decidedly, Queen Elizabeth is right. But there is also quite a bit more to the job. Requiring endless training, grit, sensitivity, and strategic and tactical thinking, being an engineer can be as challenging as being a monarch, maybe even more so at times. Yet there are some who master the profession, elevating it through selfless devotion, unwavering fairness, and an unyielding striving for excellence. For more than 25 years, City of Los Angeles principal civil engineer Julie Allen has done just that.

Her record is astounding. She’s managed numerous high-profile projects for the city’s Bureau of Engineering, including the \$110 million Machado Lake Ecosystem Rehabilitation Project, the \$42 million Echo Park Lake Rehabilitation project, as well as several fire stations and other municipal facilities. Though challenging projects all, none of them compare to her current assignment—the \$482 million Sixth Street Viaduct Replacement Project.



The largest bridge project in the city’s history, the Sixth Street Viaduct Replacement Project is as challenging as an engineering project gets. Extending 3,500 feet from Boyle Heights to Downtown Los Angeles, the joint bridge replacement project with the Federal Highway Administration and Caltrans spans *17 active railroad tracks* (requiring participation from five different agencies) and a freeway. Built in 1932, the current bridge suffers from “concrete cancer,” deterioration from a chemical effect known as *Akali Silica Reaction*. The new bridge, dubbed “The Ribbon of Light,” designed by HNTB and Michael Maltzan Architecture, features ten pairs of lit arches and will provide safer access for vehicles, pedestrians, and bicyclists. But most who use the new strikingly beautiful bridge will never know just how challenging it was to construct. Ms. Allen explains.

“In addition to 17 live railroad tracks, there are also a lot of businesses adjacent to the bridge, and we have to make sure that we limit our impacts to their operations as well. The bridge also goes over the 101

freeway, so we coordinate our work with our partners at Caltrans. With a project of this size, there are a lot of challenges and issues and constraints. Fortunately, we have an extraordinary team. From the planning on down to the construction in the field, everyone is focused and on the same page. The team effort across all of our organizations is what's making this project so successful."

But Ms. Allen points out an interesting fact about both the project and the Bureau of Engineering.

"When I first joined the project, there were very few women involved. Our project management team was mostly male. The Caltrans and FHWA staff were male. The contractor's staff were male. And I would go to meetings and literally be the only woman there. Of course, that is not too uncommon in engineering or transportation. But now things have changed. We have quite a few women on the project, both on my team and on other teams. On our team alone we have six women, four of which are in leadership positions. And those changes are reflected on the other teams as well. It's nice to have that exposure for women in the transportation field."

Ms. Allen is about to gain more exposure for women in the field. She was recently named the *2017 WTS-LA Woman of Distinction*. Honoring her rare blend of extreme professionalism, unique skill, and compassion and commitment to public service, WTS-LA sees Ms. Allen as an exemplary role model that defines the award. In addition to her outstanding professional contributions to the city and the Sixth Street Viaduct Replacement Project, Ms. Allen also serves as a mentor and a role model, providing selfless support to rising young engineers. In addition, she was recently a featured guest of the American Society of Civil Engineers (ASCE) at their *Women Leading Innovation Panel & Reception*, where she provided insight on how to overcome barriers to innovative thinking and career advancement. But perhaps the best way to learn of Ms. Allen's value to future engineers is to ask one.

ASCE Student Chapter member and City of Los Angeles employee Joanne Zhang said this about her. "Julie is not only a supportive manager, she is also a leader who shares knowledge and creates opportunities for everyone around her to succeed. She is someone who values women's professional achievements and personal successes. And although Julie is managing a project that needs her attention around the clock, she is always looking for opportunities to cultivate women engineers on her team and empower them to outreach to students in the neighboring community."

Without question, Ms. Allen embodies the principles and mission of WTS-LA, as well as the criteria for the *Woman of Distinction* award. Surprisingly, though, Ms. Allen is new to WTS-LA.

"This exposure [winning the award] is my first involvement with the organization. I didn't even know they were submitting me for the award, but [City of Los Angeles City Engineer and Bureau of Engineering lead] Gary Lee Moore has been involved in the organization for a long time and he nominated me. I wasn't aware of WTS-LA and all that it does, but it seems like a really great group and I want to be more involved. In fact, the more I learn about WTS-LA the more it seems like a natural fit for me."

As Queen Elizabeth said, engineering is about using science to find creative and practical solutions. But it's also quite a bit more, particularly in today's complex world. Through her unbounded skill, determination, and selfless belief in fairness, City of Los Angeles principal civil engineer and 2017 WTS-LA Woman of Distinction Julie Allen raises the profession to nobility.