ONE NET ZERO

Silicon Valley, the world's center of innovative technology, derives its name from the chemical element that allows a controlled flow of electrons in a transistor, turning it ON (1) or OFF (0).

In the second half of the 20th century, the Santa Clara Valley was the global hub of the silicon chip industry that enabled the rise of personal and mobile computing, making way for the thriving companies that create the technological applications individual consumers use today.

Billions of nano-scale transistors make up the circuits of computer processors. Circuits are integrated on silicon chips, a semiconducting substrate with properties that allow or block electricity. The negative or positive state of electrons makes transistors work as switches with an ON (1) or an OFF (0) state. The binary electrical signal in transistors is the foundation for the storage, processing, and transmission of information.

Computers today use the binary system to encode information from a myriad of data formats. Text, numbers, sounds, and images become strings of binary numbers so computers can process the information with billions of ON and OFF switches.

At Arena Green, the proposal showcases the binary numbers ubiquitous in all computer processes. Straddling the two sites, a bridge suspended by tension cables spans between the monumental digits 1 (Arena Green East) and 0 (Arena Green West). The cable-generated surface produces a highly visible urban landmark and a tubular space where pedestrians can experience an exceptional crossing above Confluence Point. Both visual experiences are enhanced at night with an orchestration of environmentally conscious kinetic lights.

The bridge unites both sides of Arena Green on an enjoyable journey. On the highway side, a linear switchback ramp runs along a sustainable urban farm, taking visitors up to the base of the "1" shape. On the SAP Center side, a helicoidal canopy walkway leading up to the bottom of the "0" shape allows us to explore the world of the existing trees from different perspectives.

The versatile minimalism of the binary system serves as the inspiration for the design proposal: despite the austerity of forms and materiality, the landmark delivers a variety of extraordinary experiences and photographic opportunities.

Silicon Valley unites people from around the world to collaborate in the search for solutions that enhance the human experience. The landmark celebrates a region that promotes the confluence of ideas driven by a relentless quest for simplicity in its solutions.