

The NET

Gigantic yet barely visible Net, stretched over Arena Green Park 140 feet above the ground becomes New symbol of the Silicon Valley. The Net metaphorically visualizes the Internet becoming physical representation of virtual space providing means for interaction and communication. Net structure is stretched between 3 pylons, placed within existing clearings in the parkland with minimum footprint, what helps to soften potential negative impact on the ecosystem of the park and set up a very sensitive and delicate landscape response, retaining all valuable context features. Triangular layout of the Net refers to the shape of confluence point. Triangles can also be found in geometry of the existing park plan and as a symbol of the San Jose Sharks.

As the majority of the surrounding areas will be soon redeveloped which will have a significant impact on a city skyline and generate a strong demand for additional public space. The Net project will help to solve this challenge and contribute additional 3,4 acres to the public space.

Usage scenarios. During the day The Net will become multifunctional space, providing recreation and hosting different activities: sports, festivals and events with the mesmerizing views of the San Jose skyline together with Guadalupe River and Los Gatos creek confluence and mountains on the background. During the hot days, heatwave impact can be mitigated by water sprinkler system inbuilt in Net "structure layer", creating fog within the site boundary. This will help to cool down visitors and provide shade for the park ecosystem underneath. Smart temperature control system together with live wind data analysis will help to avoid any negative impact on biodiversity of the local wildlife or airport traffic corridor located above the site boundary. Another potential use of the system: sudden rain shower at any given time on any spot under The Net via special app.

At night The Net becomes a huge landscape high resolution screen with pixels in it's knots, which can serve as interactive installations or game setup. Intentionally we don't want to be prescriptive with use types of this screen and leave a room for creativity for future users, so that the only limit is the size of the Net "screen". This gives opportunity for every visitor to express themselves by "surfing the Net" in the way they want, on a city scale canvas. The Net becomes an art installation, that is always changing and evolving side by side with the Silicon Valley and its people.

The Net structure consists of two layers with 7ft distance between them. Upper layer belongs to the visitors and lower layer holds technical facilities and is basically a safety net. Lower level Net to be placed on 7ft setback under for security reasons and is going to have a perimeter railing. It should be barely noticeable from upper layer to minimize any potential view blockage. Upper layer Net has RGB LED lights inbuilt in its knots. This technical solution will be designed in a way to protect the NET knots from weather impact and guarantee safe and secure user interaction.

Lower, technical layer of the Net will also include special pipelines delivering water to nozzle system. On top of that, each knot of the lower "technical" layer of the Net will have a photovoltaic element with micro solar panel, what gives 7500 sq. ft. of solar panels surface across the whole Net area and generate 700 kW of renewable energy per day, which should be enough to power the whole object. Any net gain electricity can be granted to San Jose energy grid. Due to the insignificant size of each panel, we expect to have only minor visual and shading impact. RGB LED lights will also be placed on the bottom of each knot of the technical layer to make interactive screen seen from the ground. Special lenses on those LED lights will help minimize excess of light during the night to mitigate potential impact on park ecosystem and avoid any interruption for air traffic corridor. Most of the lighting effects to be short-term and it's intensity and colour palette to be programmed to make its presence painless but visually impressive.

Three 140 feet Pylons will become challenging innovation structures designed as purely optimized shape following structure algorithm responding to inner and outer factors, including lifts and stairs, engineering facilities and visitors' temporary weight. Pylons to be manufactured on site using welding 3d printer technology, allowing still to capture and visualize structure pressure calculated by algorithm. Lower part of the pylons can be used as a workout set or playground. This solution will help integrate The NET to the park. All the technical infrastructure will be placed underground where pylons touch the park surface.