Project Statement (400 Words)

A riparian habitat and willow grove at the junction of the Guadalupe River and Los Gatos Creek initiate a welcoming, inclusive and immersive outdoor wonderland for community gathering. Viewed from above, the site, situated between the SAP Center at San Jose and elevated Highway 87, becomes an astonishing, expansive urban canvas delivering high impact visibility through gentle and sustainable means. Using vegetation as the primary medium, PHYTO PHOTO ECO ICON stretches across the site uniting the two parcels into a colorful composition that works to restore the riparian habitat of the Guadalupe River through phytoremediation and a field of soil flushing devices that clean the mercury contaminated soil.

This unlikely icon of expanse is primarily composed of live and changing vegetative material, a dynamic composition. The plants in the palette include riparian natives as well as drought tolerant natives. Plants proposed along the river like yellow polar, Indian mustard and beard grass are able to absorb and consume the mercury which contaminates the watershed.

Additional to the natural technology of phytoremediation, our project deploys a field of soil flushing devices to clean heavy metals from contaminated soil through electrochemical filtration. Through this process, mercury is reduced to its zero valent metallic state without producing secondary pollution. The soil remains nutrient rich preserving the benefit to native flora and fauna on site. The devices produce a mist when in service producing and unexpected and otherworldly mist.

Each soil flushing device includes a wind vortex to harvest energy and a programmable color changing light source. At night the canvas is set aglow with kinetic color light that supports the ecosystem by limiting full-spectrum and low-wavelength lighting and demonstrates the seasonality of natural cycles. Additional mitigation measures include the use of timeclock controls to lower or shutoff lighting during particularly sensitive times of the day or season for local wildlife.