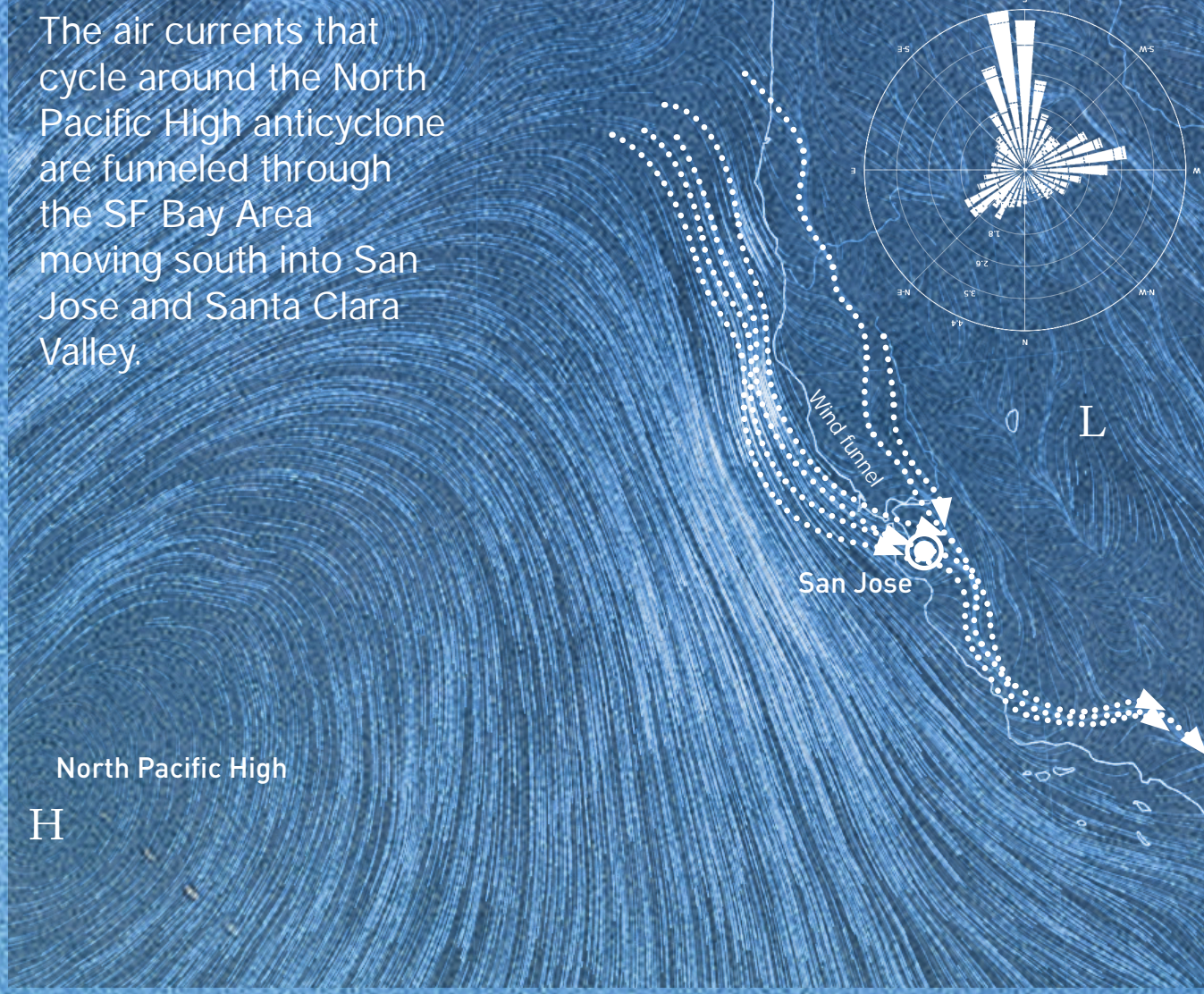


# WINDFIN

An Observatory of Air in Motion

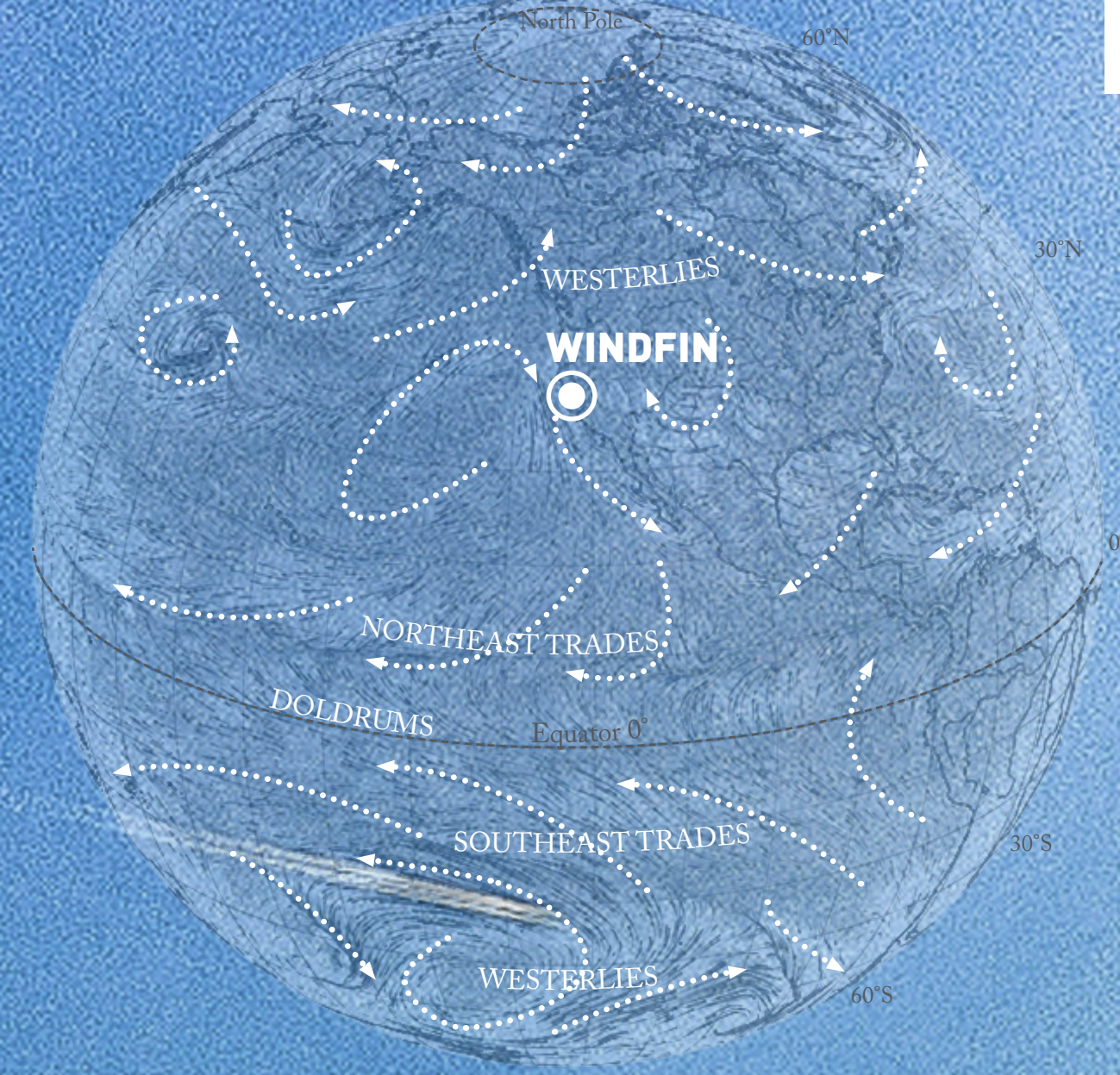
The connection between human beings and the air we breathe has never been more relevant. In the current context, we have realized that the atmosphere that we inhabit makes a far stronger bond than world economy, the internet, or global politics.

The question of how to create a timeless landmark in San Jose should not only respond to local, regional or even national conditions. A landmark should be global, however avoiding the irrelevance of adding up to the endless list of world landmarks as tourist attractions. A landmark of the 21st century in California should acknowledge its place on the Earth, a planet that is a highly complex system of ecological interconnections that we deeply rely on. The San Jose landmark finds its place in the atmosphere, making us aware of our profound dependence on the ethereal and massive aerial ocean. The San Jose Landmark will be an Atmospheric Landmark.



**WIND PATTERNS ALONG THE CALIFORNIA COAST**

Source: Earth Wind Map /GFS/NCEP/US National Weather Service earth.nullschool.net (2020)

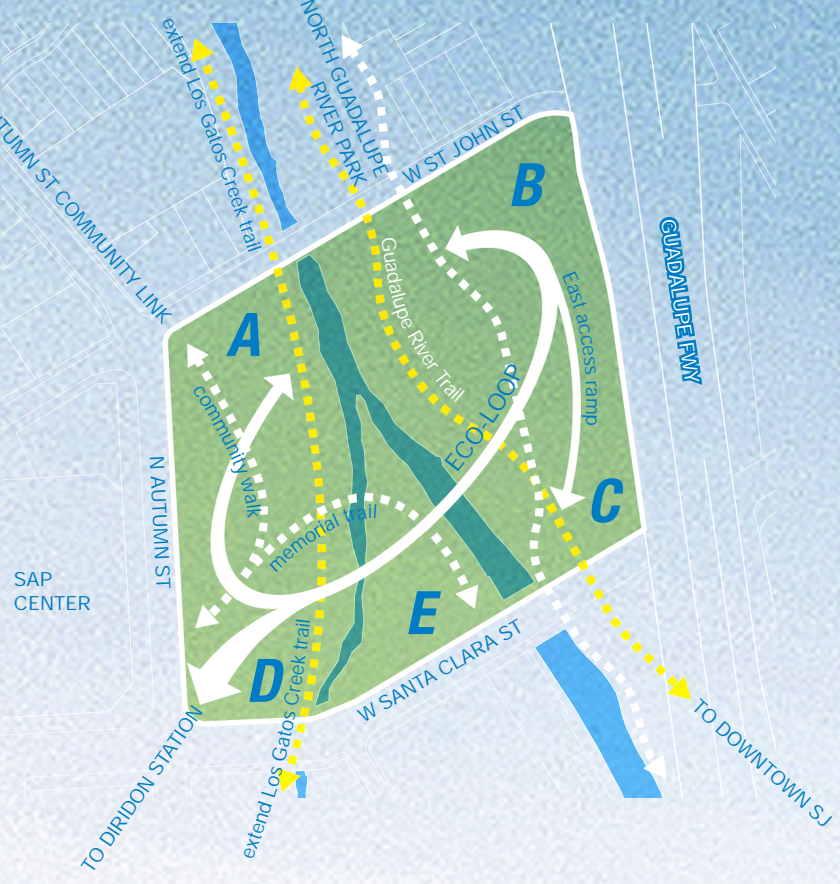


**THE ATMOSPHERIC LANDMARK ON GLOBAL WIND MAP**

Source: Earth Wind Map /GFS/NCEP/US National Weather Service earth.nullschool.net (2020)

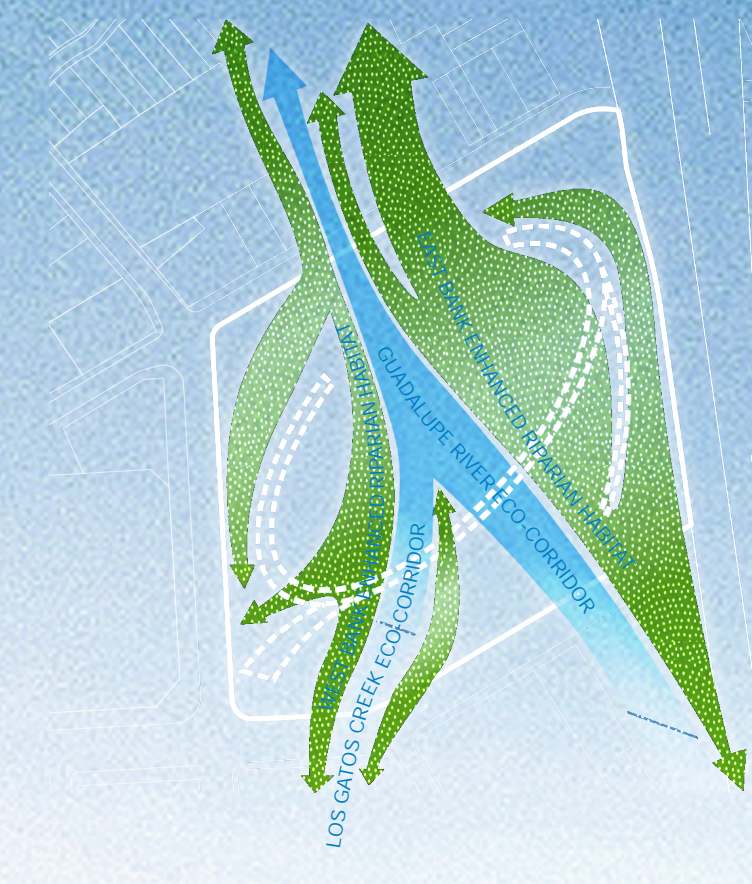
## GUADALUPE LOOP

A 1600 feet long Eco-Loop will connect both sides of the Park, spanning across Los Gatos Creek and Guadalupe River. Gentle sloping ramps plus an enhanced trail system will reconnect and reactivate all four corners of the site.



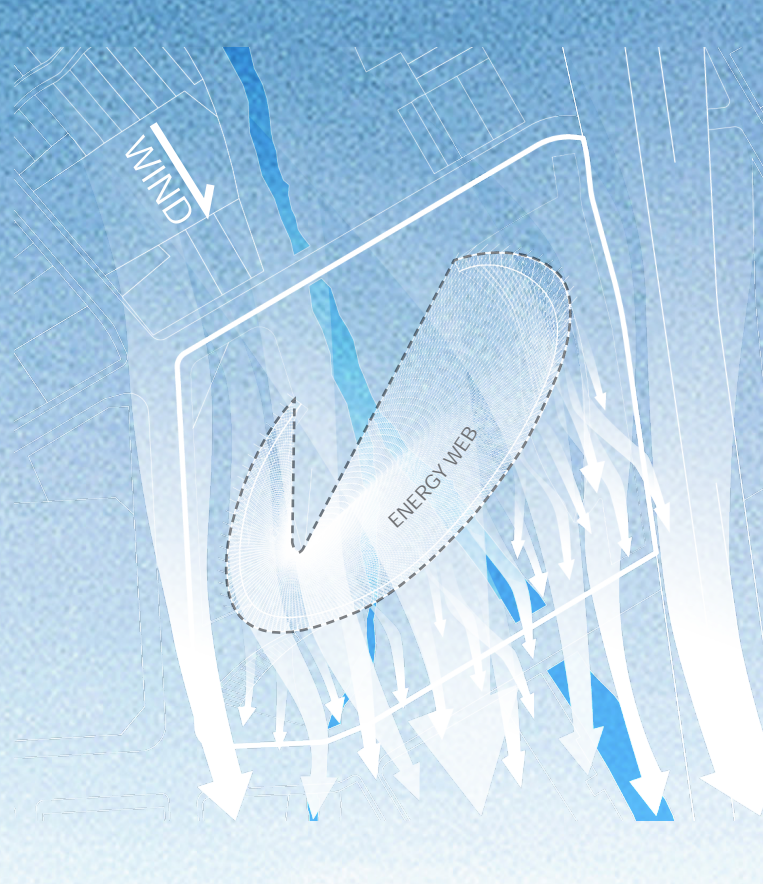
## ECO-NNECT

Keeping an unobstructed riparian network and restoring riparian habitats on both banks with a thoughtful plant and tree selection will improve and expand both river and creek ecological corridors.



## WINDWISE

By aligning perpendicular to the prevailing NW winds and creating a highly permeable energy web, the WINDFIN will make the invisible air visible, while allowing for a steady & unblocked airflow that will help achieve comfort levels during Summer.



## PARK FOR ALL

A new set of highly active zones will bring all areas of the park back to life. To the West, the existing carousel and play areas will be reorganized to allocate the new Observatory Educational Gardens, that will serve as an atrium for the Community Center. To the East, a new amphitheater will complement Arena Green.



**SJART. COMMUNITY CENTER**  
30,000sqf space for San Jose Community Art

**OBSERVATORY PERISCOPE**  
Atmospheric observation and main structural column

**ENERGY WEB**  
Solar + Wind Energy capture  
40,000 moving thin film mini-solar panels

**ARENA GREEN AMPHITHEATER**  
for outdoor events

**WINDY CAFÉ**  
Activator and SJArt. entry at NW corner

**RECREATIONAL SLOPE**  
Lawn games & Play Area

**MAIN OBSERVATORY ENTRANCE**  
Keeps Five Skaters Memorial

**OBSERVATORY EDUCATIONAL GARDENS**  
Native Riparian Gardens for community education

**ARENA GREEN EAST**  
enhanced plant & tree selection to improve riparian habitat

**FOREST BUFFER**  
HWY noise reduction

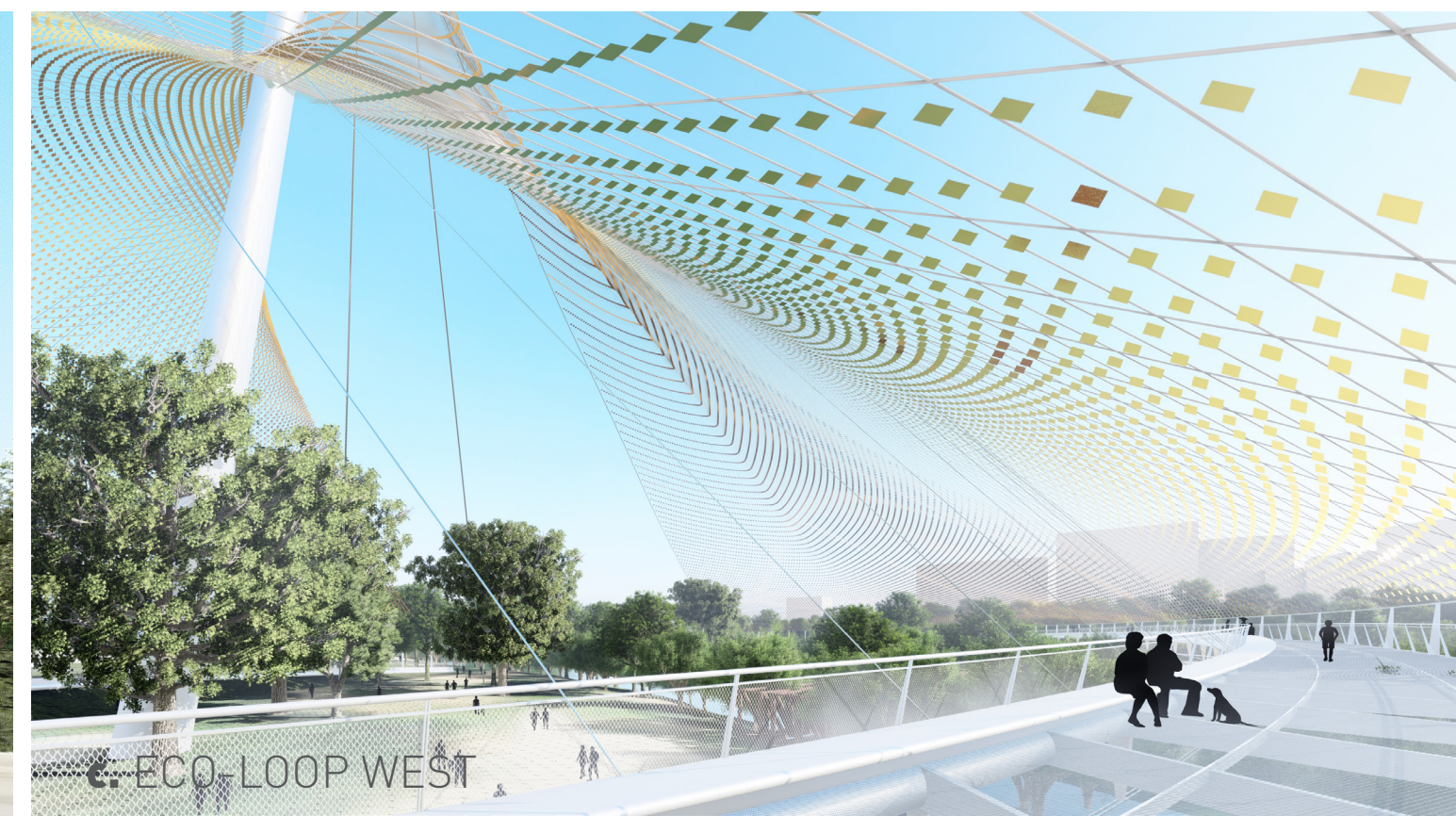
**CONFLUENCE POINT**  
Vietnam memorial and Tributaries Monument remain untouched

**ECO-LOOP**  
Elevated pedestrian and bike promenade for wind contemplation

**EXISTING BRIDGE**  
Keeps Five Skaters Memorial

**SW MAIN STAIRS & ACCESS RAMP**  
Connects loop to SW corner

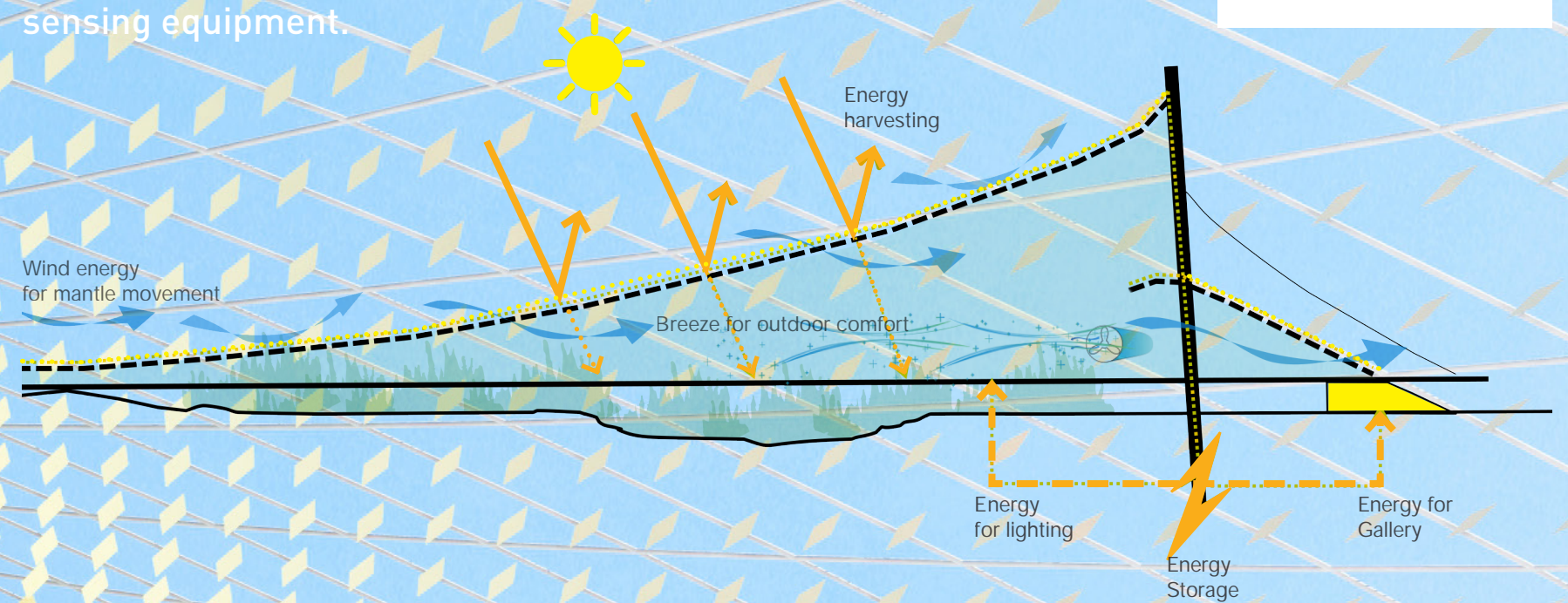
**a. AERIAL RENDERING OF WINDFIN LOOKING NORTH**



# WINDFIN

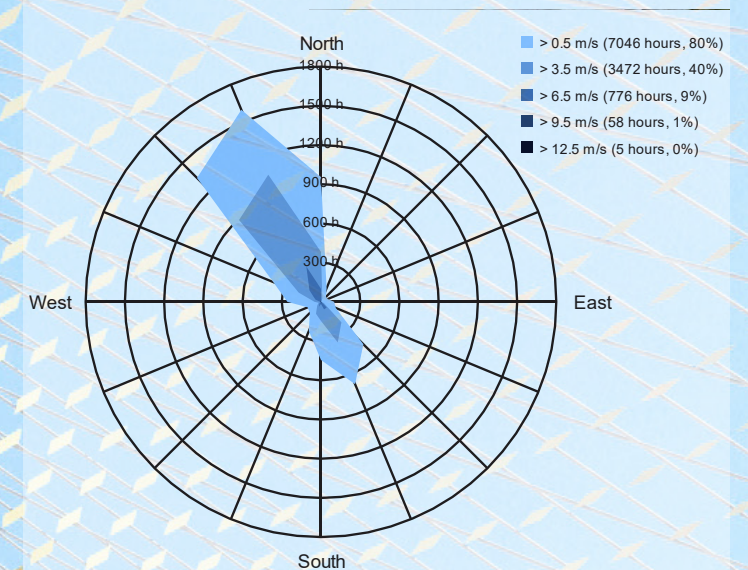
An Observatory of Air in Motion

WINDFIN is an observatory of air in motion. Its existence is only instrumental to reveal and create awareness of the presence of the atmosphere. It is a giant sensor of wind movement, and a climate remote sensing station focused on atmospheric change. Forty thousand thin-film mini-solar panels will sway with the wind to generate enough energy to power the new 30,000 sqft SJART Community Center and the Observatory Periscope and remote sensing equipment.



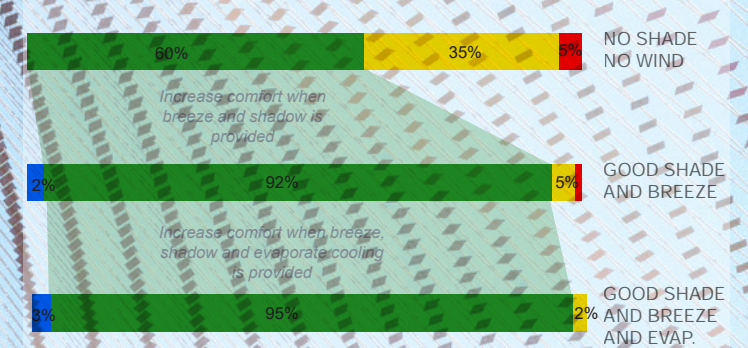
## 1. SUSTAINABLE

Using a comprehensive approach that integrates net zero design with microclimatic design principles, WINDFIN will harness energy from the sun and the wind while providing shade and evaporative cooling for outdoor comfort.



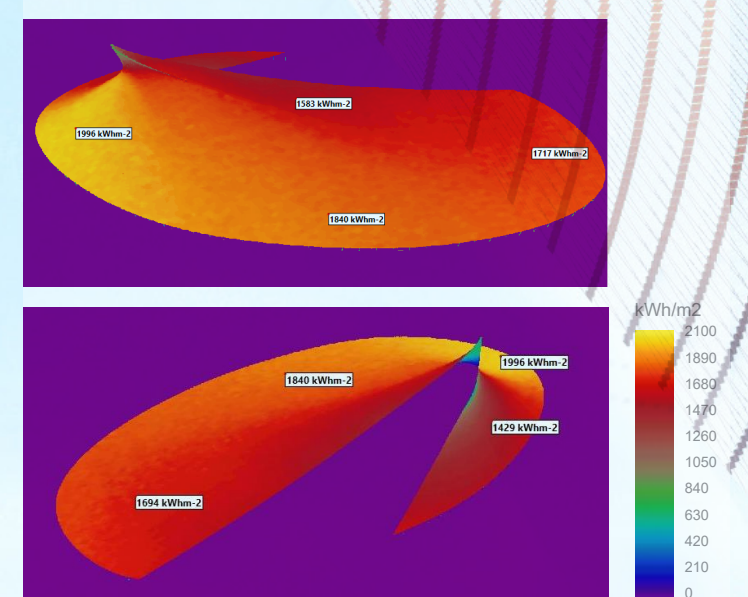
## 2. WIND

The main wind direction in San Jose is northwest with a speed between 0.5 and 3.5m/s. The northeast direction is mainly seen between April and November (warm months). Between December and March, the predominant direction is southeast (coolest months). To enhance the benefits of the wind, both for the movement of the mantle and for outdoor comfort, the structure is open to the northwest.



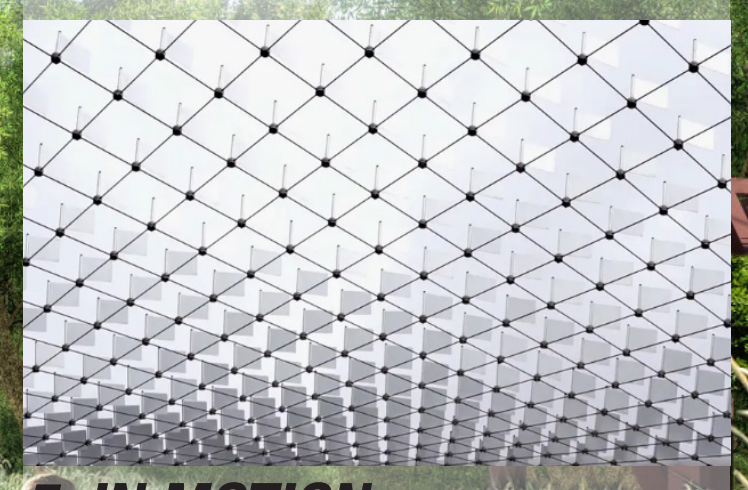
## 3. COMFORT

San Jose has a Mediterranean climate where 60% of the time can be considered comfortable. This comfort percentage can reach 92% of the year if good shade and breeze are provided. Also, if evaporate cooling is provided, this percentage reaches 95% of the year.



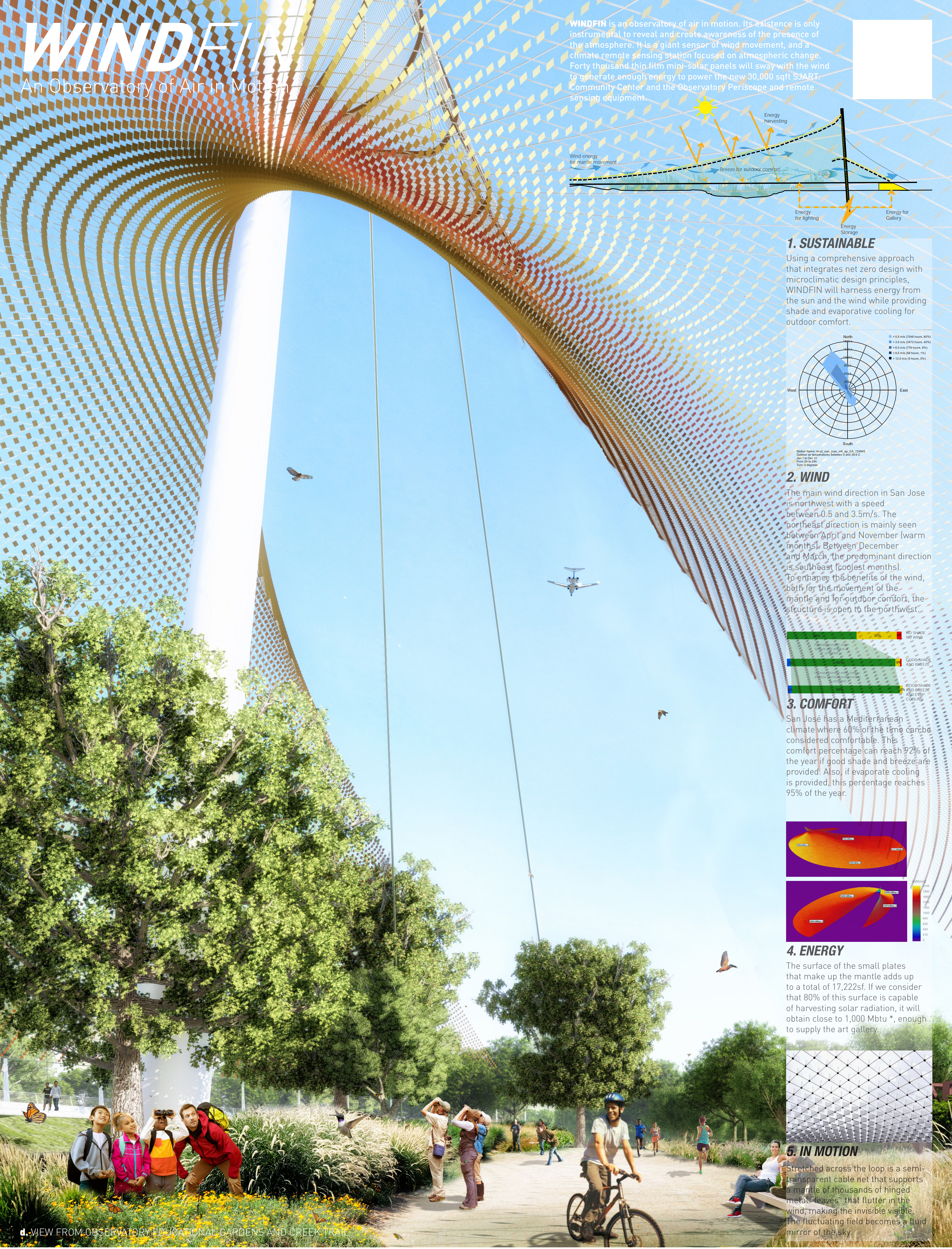
## 4. ENERGY

The surface of the small plates that make up the mantle adds up to a total of 17,222sf. If we consider that 80% of this surface is capable of harvesting solar radiation, it will obtain close to 1,000 Mbtu \*, enough to supply the art gallery.

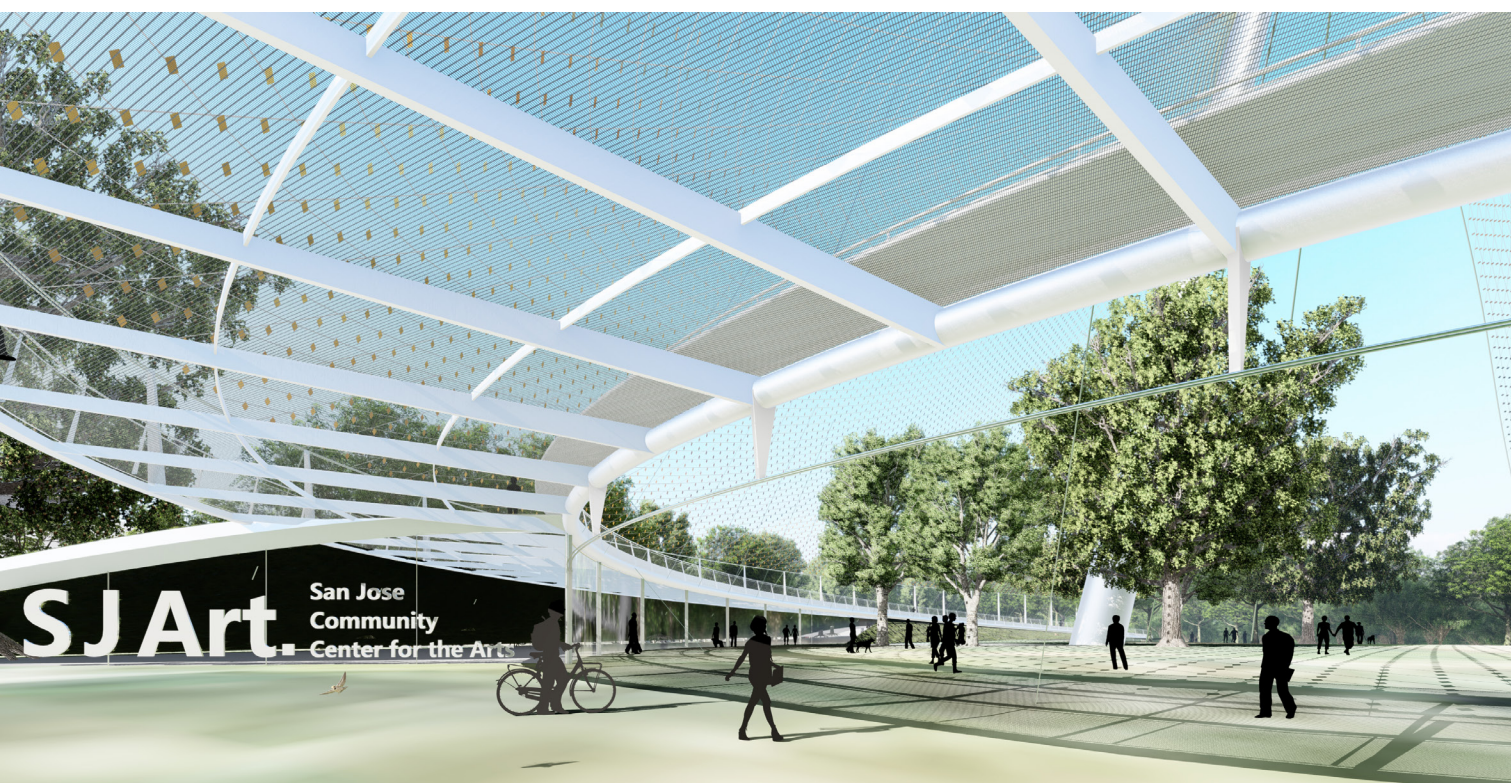


## 5. IN MOTION

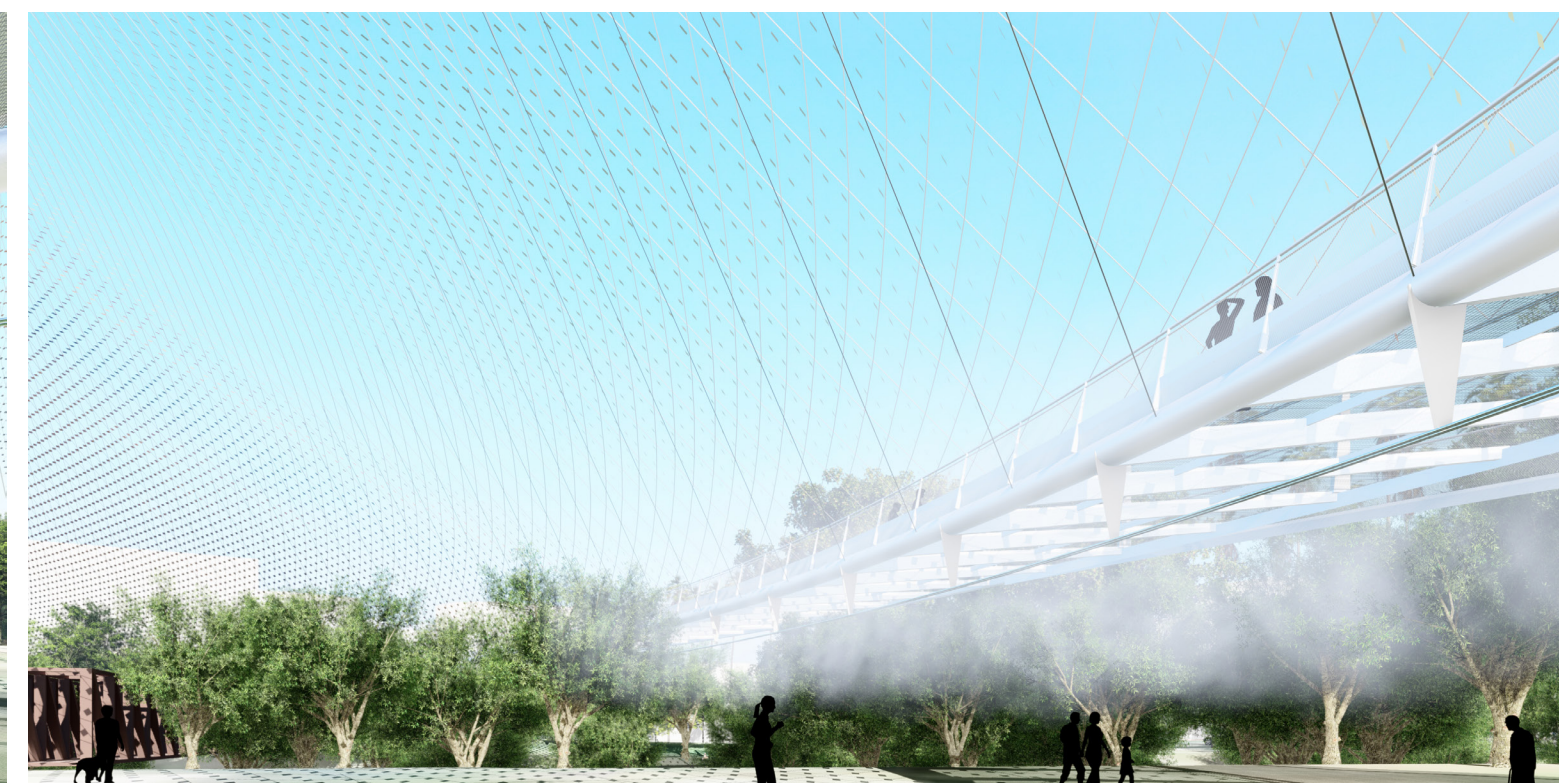
Stretched across the loop is a semi-transparent cable net that supports a mantle of thousands of hinged metal "leaves" that flutter in the wind, making the invisible visible. The fluctuating field becomes a fluid mirror of the sky.



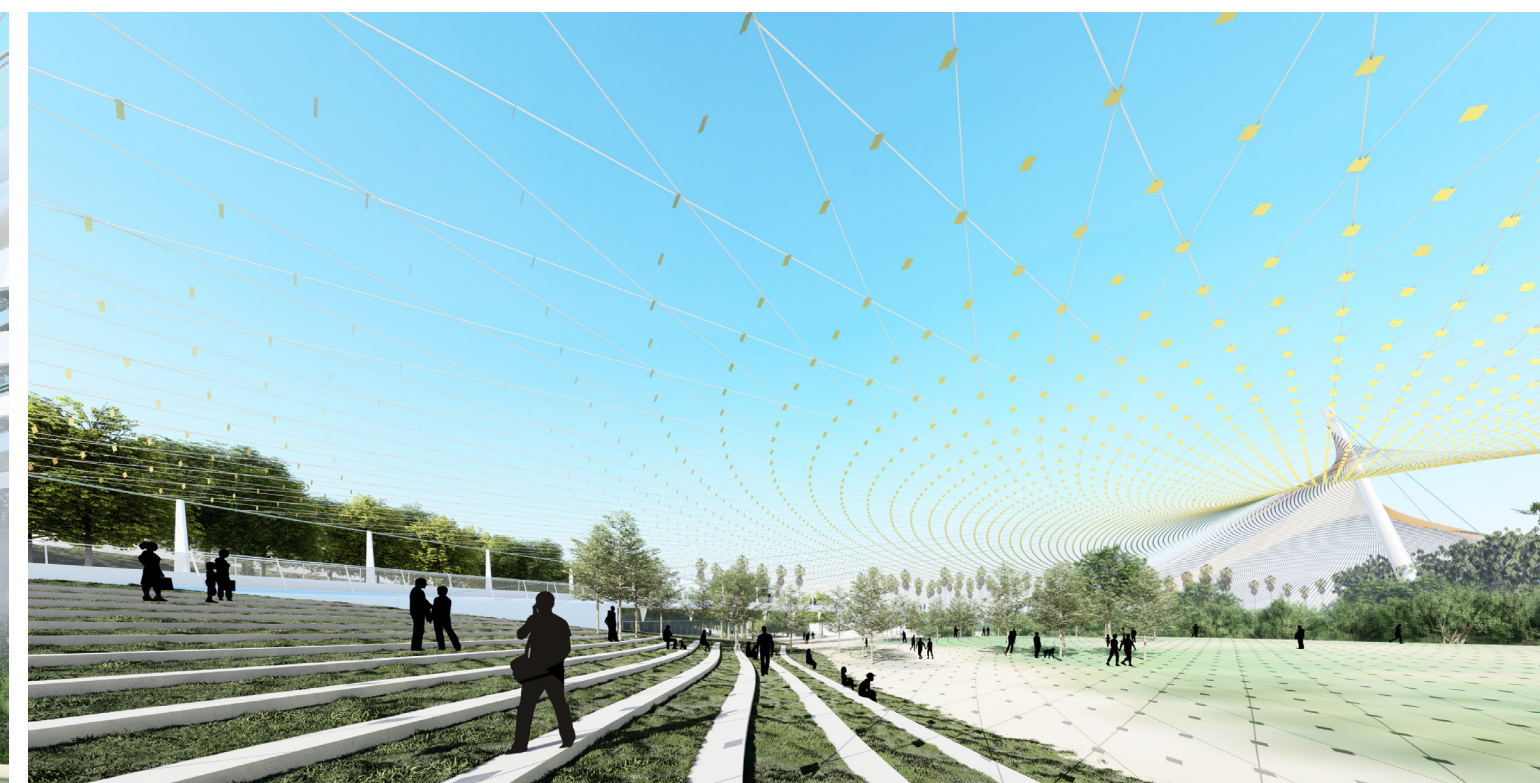
d. VIEW FROM OBSERVATORY EDUCATIONAL GARDENS AND CREEK TRAIL



e. SJART COMMUNITY CENTER ENTRANCE



f. EVAPORATIVE COOLING UNDER FLOOR



g. GREEN AMPHITHEATER