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"It is the time you have wasted for your rose that makes your rose so important."

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- Antoine de Saint-Exupéry, The Little Prince
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## Project Location



## Context

Beyer Park will be located on Beyer Boulevard just east of Interstate 805 and south of San Ysidro Middle School. It's designed to serve the communities of Otay Mesa and San Ysidro. San Ysidro as a border community located at the California/ Baja California border faces risks that are not felt by other California communities. Being close to the international border appears to result in elevated exposure to pollution from lines of idling vehicles at the Ports of Entry, trade-related commercial trucks, and transport of pollutants from Mexico. At the forefront of this social justice conversation is Casa Familiar. Before our first "meet the artist" community event Casa Familiar approached the Commission for Arts and Culture to ascertain if we would be willing to design artwork that "actively engaged with" air quality concerns and mitigation. This is an exciting proposition for us; art that makes a positive imprint on its environment, is a large part of our practice.


## Research and Findings

During the "meet the artist" event we were impressed by the excitement and engagement we witnessed from the younger participants who expressed how important the skatepark was to them, not just for the recreational aspect of the park but for the voice it gave them in lobbying for it; for some, it was just their first foray into social activism. As we performed subsequent site visits and spoke with representatives from Casa Familiar we realized how this park was at the axis of environmental justice, health, quality housing, open space, urban greening, and social justice conversations in San Ysidro, and that all of these conversations are inseparably interconnected. With this in mind we fully committed to investigating the air quality component of this project.

We began by asking ourselves how art can operate in this way which is different than the current monitoring systems in San Ysidro, or the tree plantings that have been added to the park plan. Our answer has come in breath. Of all of the technologies and alternative building/surfacing materials currently being developed, the most efficient way of approaching air quality at the scale of public art seems still to be a natural one, trees. An average of 48 pounds per year of CO2 can be sequestered by a mature tree (figure provided by the Arbor Day Foundation,) which leads us to the role of art in
this project. Art has the ability to make concrete, palpable, intuitive, and/or emotive those ideas which are often too abstract to grasp. What does a tree's impact look like? When it takes in CO2 and other pollutants and releases O 2 how big is that "breath?" Can we visualize this process? Can we crystallize the idea of atmosphere?
 Can a singular tree in this environment be precious to us? How does that change the way we see all of the other flora onsite and in our lives? These are questions at the core of our proposal.

## Input and Feedback

Community and design team input and feedback to information provided during the Preliminary Idea phase of our proposal process focussed primarily on the physical parameters of the artwork and its relationship to the tree. Many of the voiced concerns have been addressed in detail as adjustments and clarifications within other aspects of this proposal. A brief summary and response has also been included here:

1. There have been multiple inquiries about the size of the artwork's structure in relationship to the tree. At 25 ' in total height, the steel structure will contain $21^{\prime}$ of vertical space and be just under 12' in diameter at the base spreading to approximately 22 ' diameter before the final canopy spread to a 30' diameter. This should be adequate to contain a Catalina ironwood at multiple growth stages. This species choice has been arrived upon based on our initial Southern California species research and in discussion with the design team.
2. The structure's primary function is to visually define a volume of air around the tree and to provide a setting and context to experience this particular tree within the park. With this in mind, concerns about "containing" the tree should be addressed through occasional pruning through the early growth of the tree. Later, as the tree reaches
maturity it can be allowed to grow through the structure slightly if necessary.
3. Our initial description of the concrete planter/plinth being 6 ' in height was initially arrived at while considering limiting access to the artwork and dissuading climbing. As per suggestions from the design team and stakeholders we have adjusted that height to 4' tall. It is our intention for the soil surface to be flush with the top of the planter/plinth.
4. The fogger heads will be arranged through out the entire vertical range along the perimeter of the structure.
Replacement will require a lift truck. A similar system is currently in use in a different application at the San Diego Zoo, and has been in operation for over a year without cleaning or replacing the fogger units. This is a high pressure, potable water system that has its own hard water filtration system located at the pump/controller enclosure.
5. Community comment expressed excitement with the idea that a water feature might be included with the work and asked if the "misters" could face out from the structure for cooling. Although we will not be positioning the fogger heads to point out, they do produce an extremely fine atomization of water that provides cooling but is not significantly wetting to the touch. This atomization of water will be easily carried by any breeze out of and away from the artwork for interaction with park visitors.


We propose to plant a singular tree and grow that tree within a sculptural "Wireframe" enclosure that relates visually to the growth of the tree, to the volume of air processed by that tree over a set period of time, to decorative vessels in the way that they create a preciousness of contained space, and structurally to the process of systematic paper folding and engineering. We choose to plant one tree, as opposed to many, for the reason that art must create a relationship with its viewer or participant. Knowing a tree, watching it grow, witnessing the seasonal changes of a singular identifiable entity, creates empathy and connection. We feel it is a net gain, to trade over-all air quality impact of our particular work for the possibility of inspiring future climate activism. We want the unique relatability of this tree to generate reverence for all. The structural enclosure frames this particular tree. It creates a charismatic space to contemplate the living processes of a tree. We will relate the volume of the framework to the removal of greenhouse gases from air over time. Using a fog of atomized water released around the tree from the perimeter of the structure at intervals relating to the amount of time it takes a tree to respirate will act to intuitively illustrate the "breath" of a tree. The atomized water will also have the added effect of attaching to and precipitating out some of the heavier air pollutants. Air quality issues are difficult to relate to, until they become acute when a

brush fire changes the taste of the air or the color of the sun, or you or a loved one struggles for breath under the pressure of asthma...etc. Beyond extreme situations the sky is boundless, an abstract place where "weightlessness" reigns supreme. The steel structure around this tree will crystalize the "impact zone" of this tree allowing us to imagine the purity of the air within its radius as it clarifies its own environment, aspirating that for us as part of a regular and perceptible cycle. The form of the structure relates to the basic gesture of up and outward growth of the tree, ask a child to mimic the growth of a tree and you will inevitably be greeted with outstretched arms reaching out and skyward. The structure of the enclosure is modeled from systematic paper folding. The complexity of form created from the creasing and folding of a singular plane of simple material, with its origins being of the tree, reflects a conceptual relationship that is found in many natural processes. The size of this project at 25 feet tall, $12^{\prime}$ in diameter at the base and 30 ' in diameter at the canopy emanating from a $4^{\prime}$ tall cast concrete planter/plinth is in direct relation to the Catalina Ironwood tree selected for this artwork. We also hope to engage with further community partners such as Tree San Diego, and Casa Familiar to bring the greening of urban space within reach using this installation as a touch point for action.




