

# ART + ENERGY = CAMP

July 20 Design Process Presentation—Start of week 3 of 6  
Concept design complete, beginning design review and development





# RENAISSANCE GATE

a 4 kW solar installation for the Homewood Renaissance Association



## FORMAL INSPIRATION

What inspires us?

All of us in the Art+Energy Camp have different answers, from mountain streams, to animals, to city skylines, to the night sky.

One source of inspiration that was shared by many is the form of a flower.

Flowers come in many shapes and sizes. They all display some kind of symmetry across at least one axis. Some of the most interesting flowers are those that only display symmetry across one axis, like the jack in the pulpit (*Arisaema triphyllum*), the orchid (*Orchidaceae*), or the bird of paradise (*Paradisaeidae*).



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These gates all have symmetry across only one axis like the flowers on the previous page.

## CONCEPTUAL INSPIRATION

What story do we want to tell to those who visit the artwork?

We came up with the idea of a gateway, which works really well with the existing marquee structure.

Visitors to the artwork will be able to walk through the gateway from the past into a promising future Homewood neighborhood. It is a hopeful gesture. A beacon to prosperity and harmony.

It's also a global concept from the frame of our necessary transition from old to new forms of electricity generation.

Important words that relate to the concept:

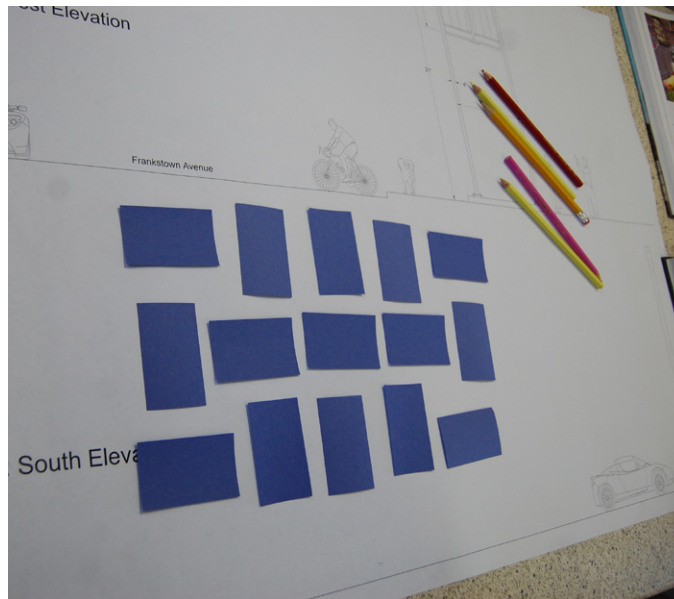
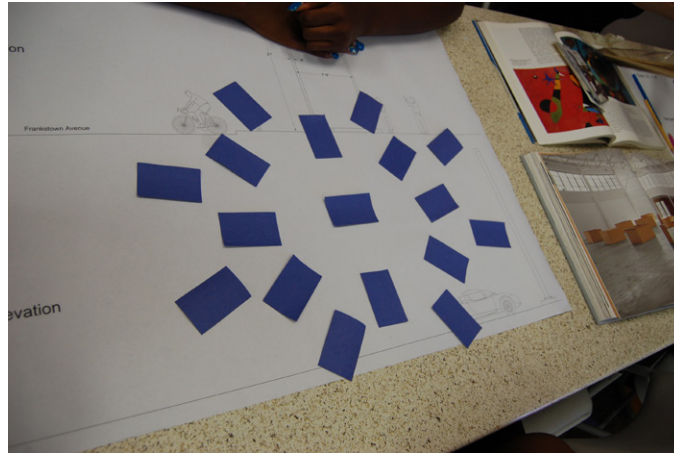
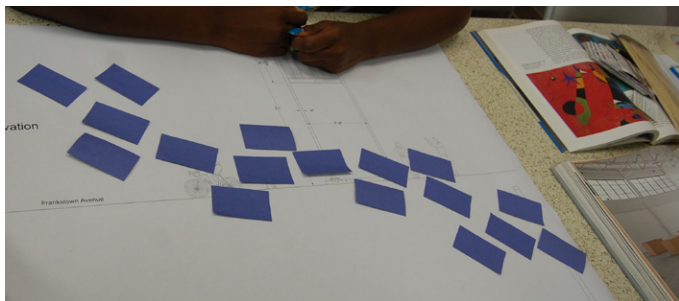
Renaissance	Hope	Friendship
Positive	Happiness	Peace
Compassion	Love	Strong
Kind	Grace	Dignity
Honesty	Forgive	Family
Trust	Integrity	Truth

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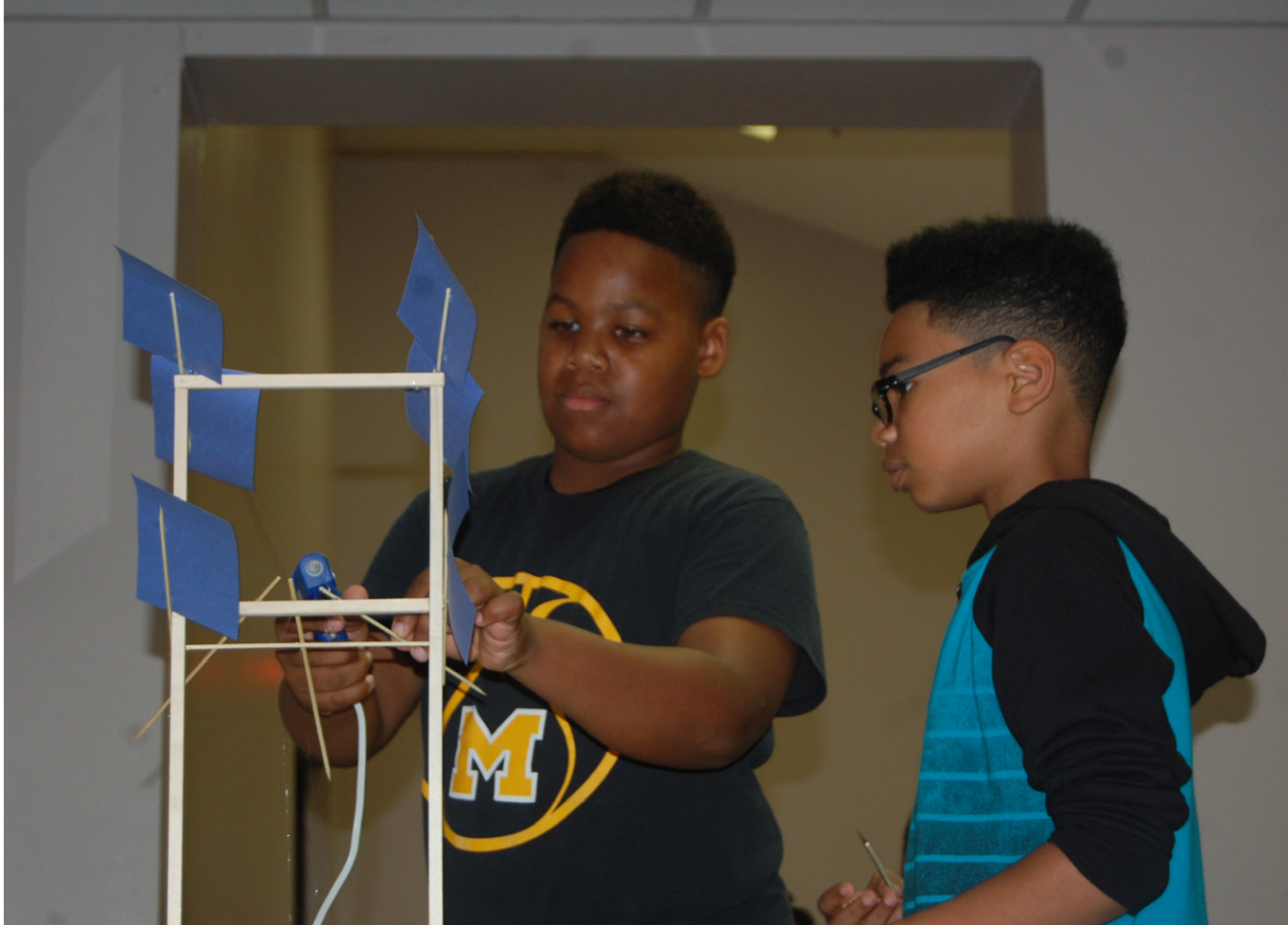
## FORMS AND SHAPES

Early in week 2, Elizabeth and Sarai worked on some flower and snowflake inspired forms made from the panels. Maya, Emani, and Madison came up with some interesting geometries related to flowing, riverlike forms. Terrell had a very simple and rectilinear composition.

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## WORKING IN 3D

We have 15 large solar panels and 2 small solar panels.

There are an infinite number of possible configurations. How can we emphasize the gateway concept?

Caleb and Terrell worked on some ideas for a canopy that can shade people from the sun and the rain using the solar panels themselves.

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## WORKING IN 3D

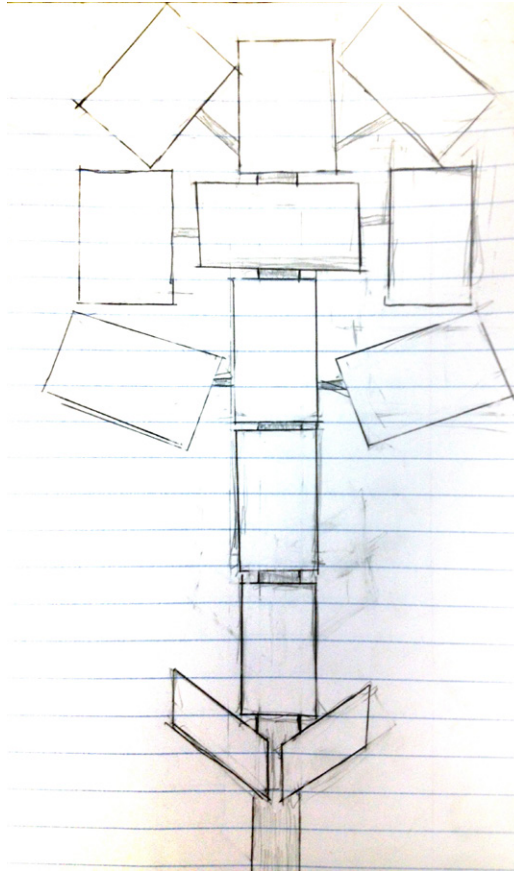
DaVontae, Canaan, Jordan, and Jordan worked in 3D on the computer with Sketchup.

It's interesting to see how the form that they derived is quite similar to the one that Rodney sketched that morning on site and refined the next day (following page).

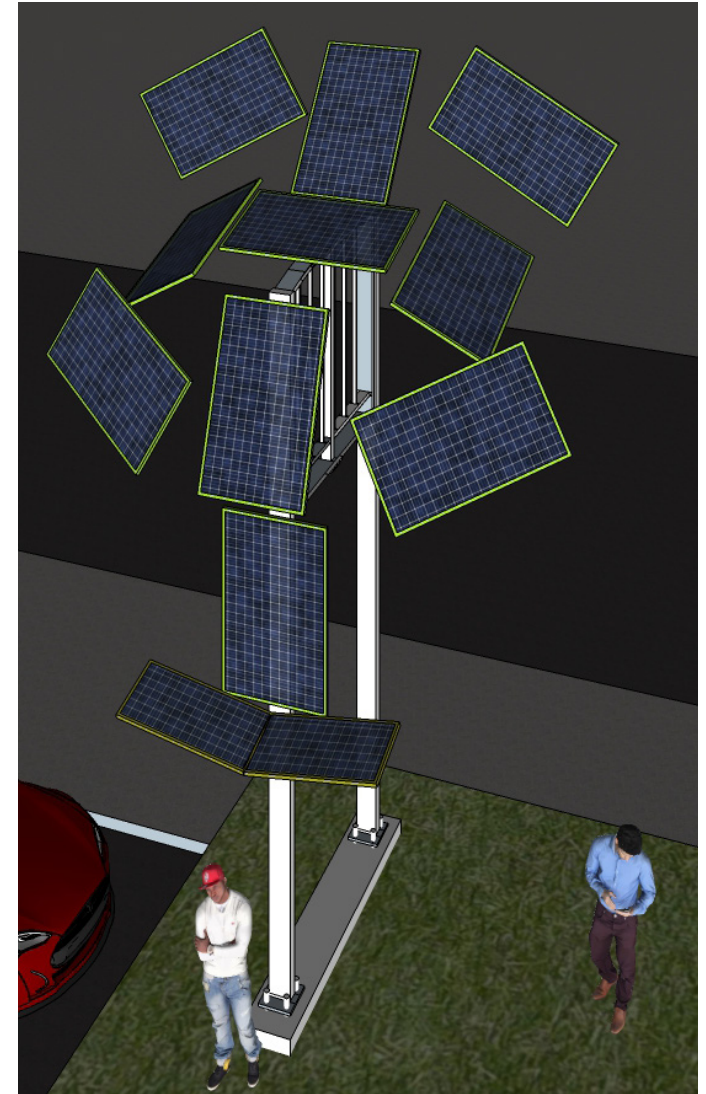
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Sketches by Rodney Heard. Inspired by the flower and the radial symmetry form. Emphasis on a flow from the stem to the flower. Putting it into sketchup resulted in a composition of 10 large panels and two small ones. Can we get the other 5 in there? How can we make it practical to install?



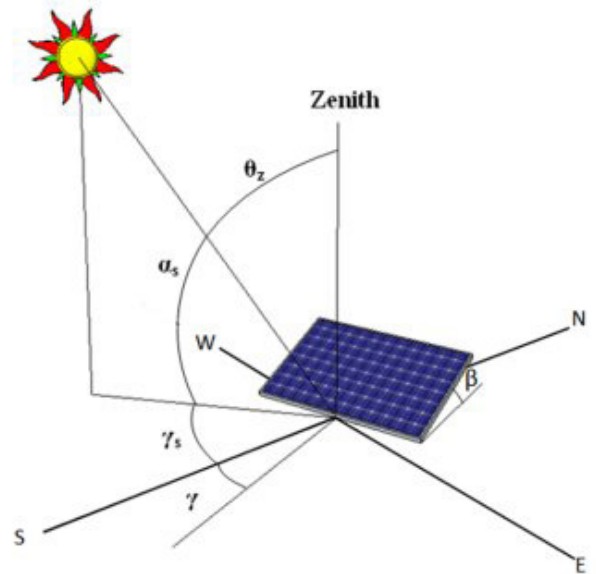
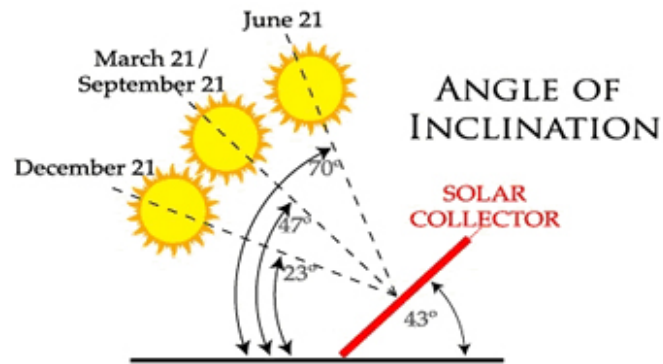
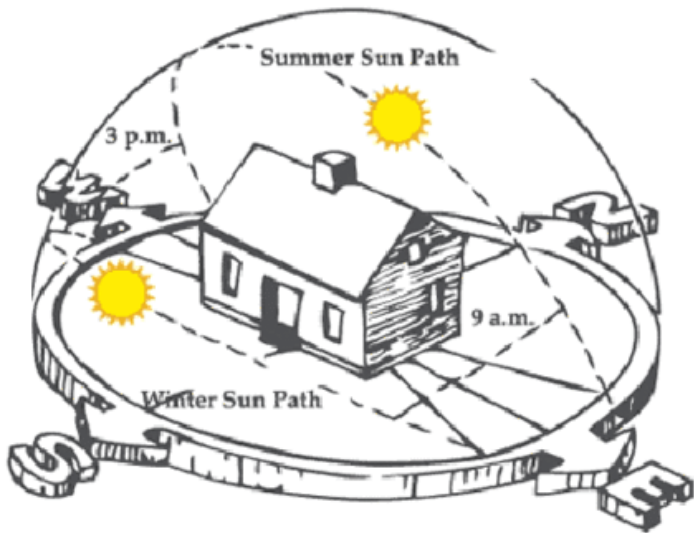
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## CONSIDERING THE SUN

Throughout the design process, we had an understanding that the solar panels would need to mostly face south. Thinking about the way the sun moves in the sky will help us to maximize the amount of electricity that the installation will make.

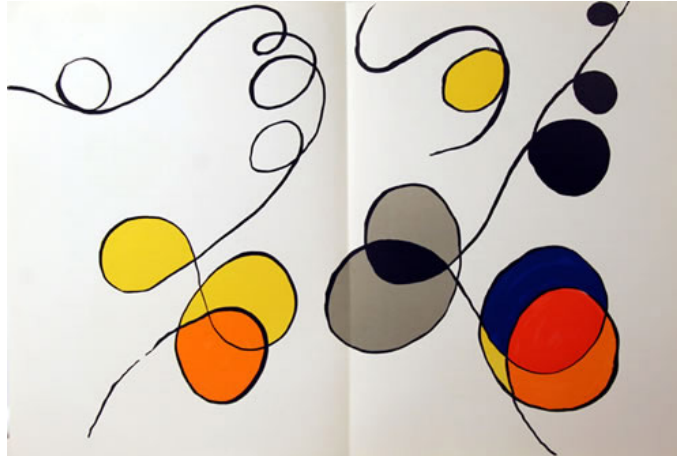


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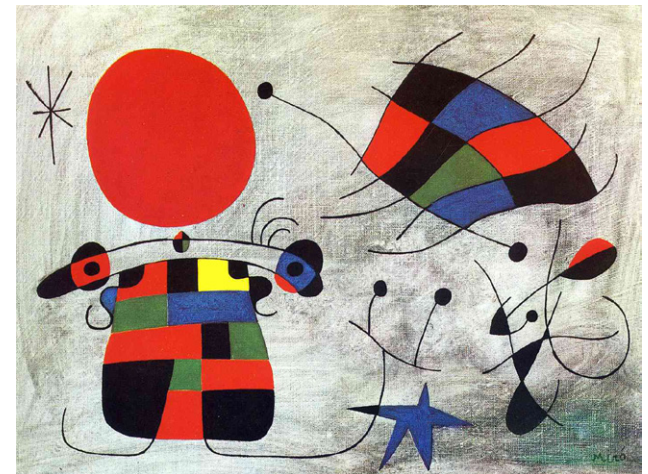


## THINKING ABOUT COLOR

When we were out on site we talked about painting the old marquee blue so that it blended in with the sky.

We talked about how we could represent the warmth of the sun by bringing yellows, reds, and oranges into the mix.

On this page are paintings and sculptures by Jacob Lawrence, Alexander Calder, and Joan Miró. These artists were masters of using bold bright colors with a palette similar to the one we are thinking about.



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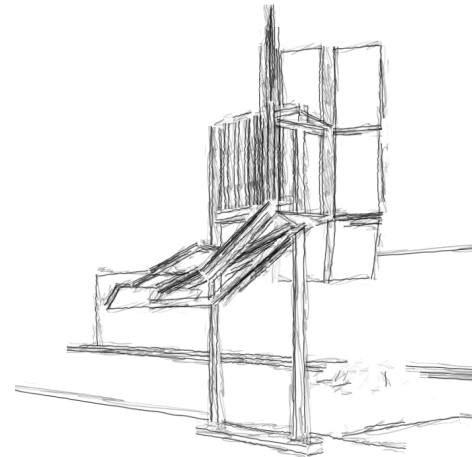
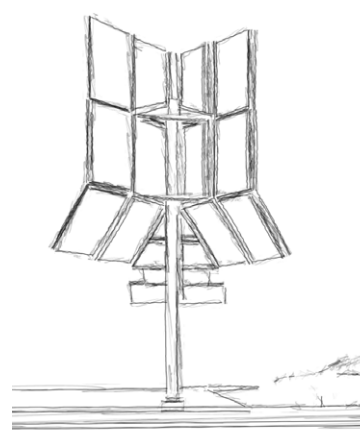
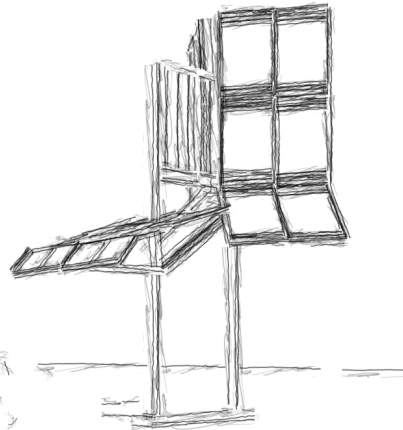
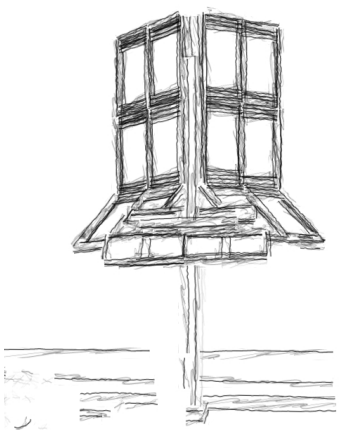
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## DESIGN REVIEW

Can we find a solution to our design problem that meets all of our criteria:

- number of solar panels
- concept (renaissance gateway)
- inspiration (the flower and the sun)
- existing conditions (works with the marquee)
- solar path across the site

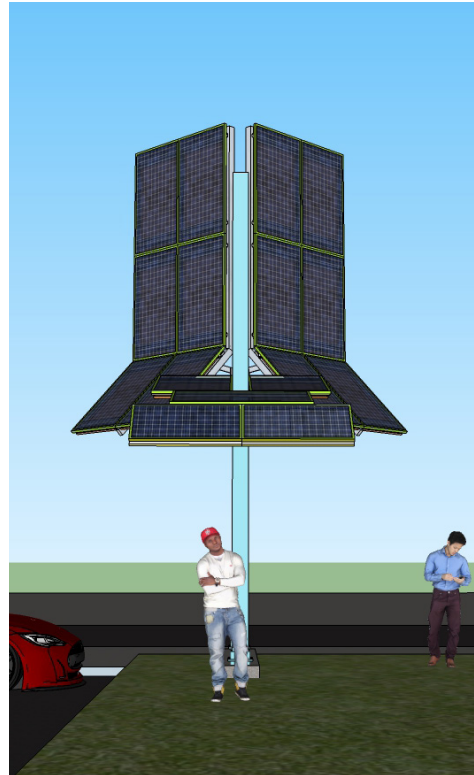
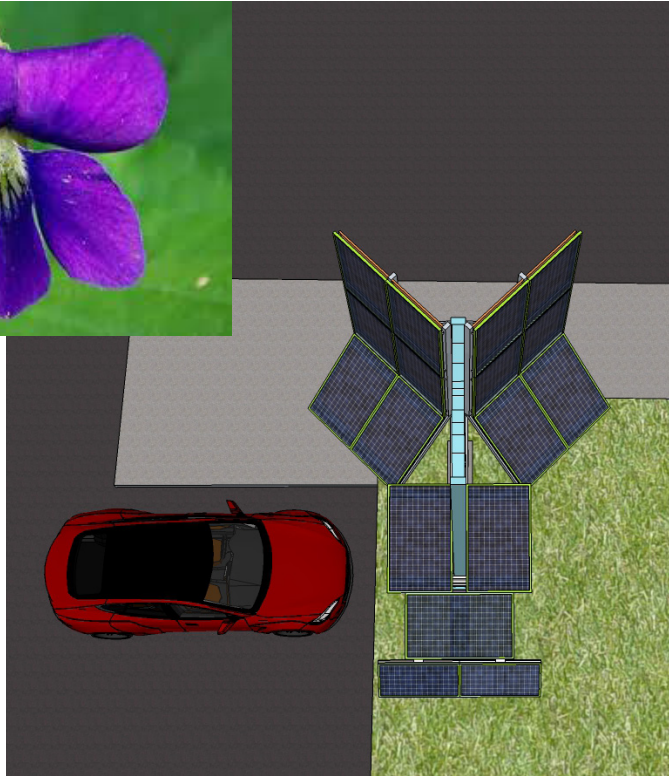


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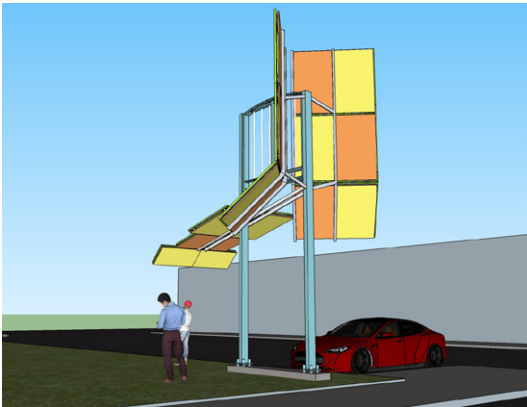


## SIMPLE GESTURE

Here are some images of a 15 large panel + 2 small panel composition that takes inspiration from the flower, creates an interesting gateway, and does a pretty good job of maximizing solar exposure throughout the day.

Now we will need to talk with Mr. Underwood and with a structural engineer to figure out all of the details. It will most likely change during detailed design.

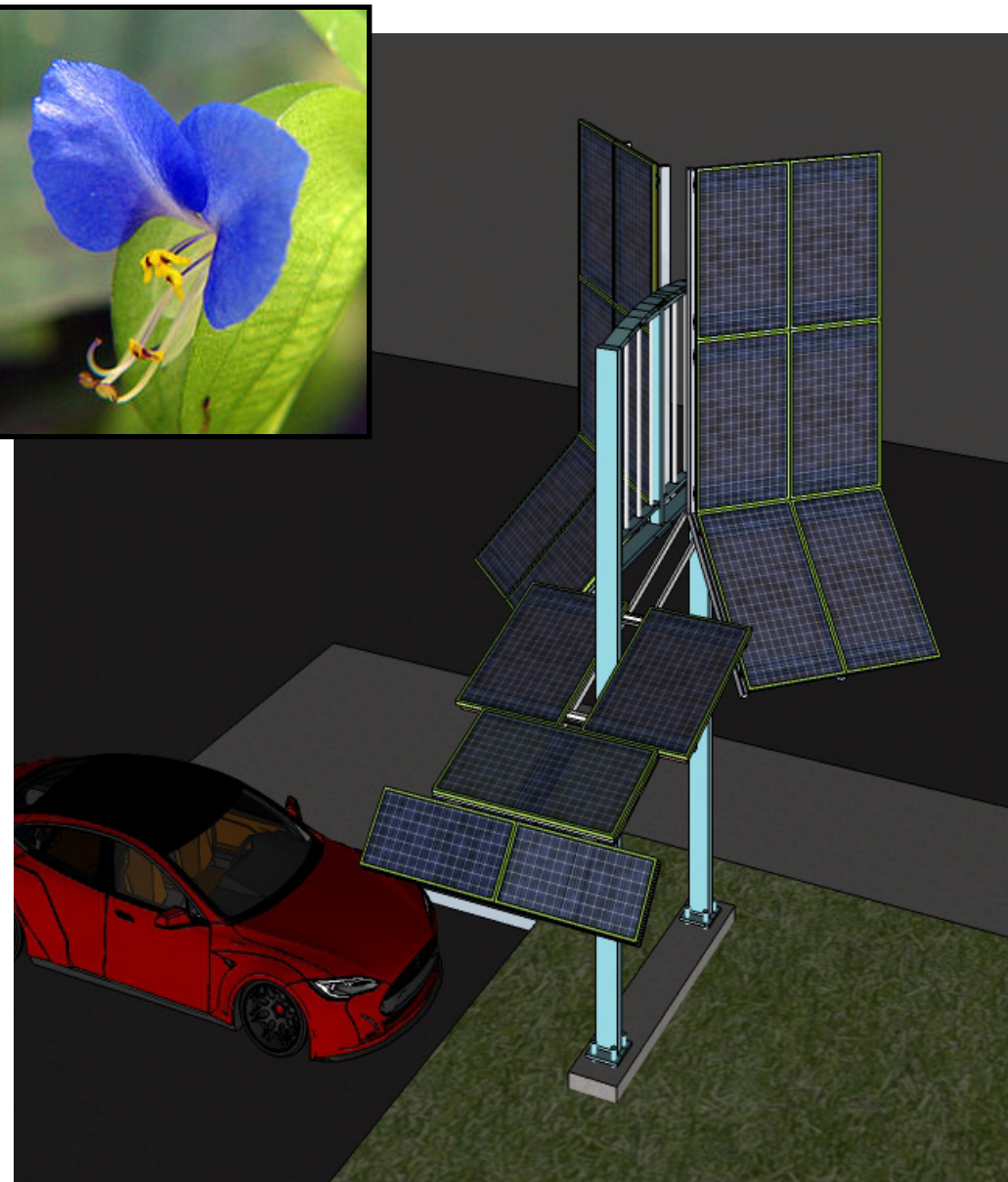
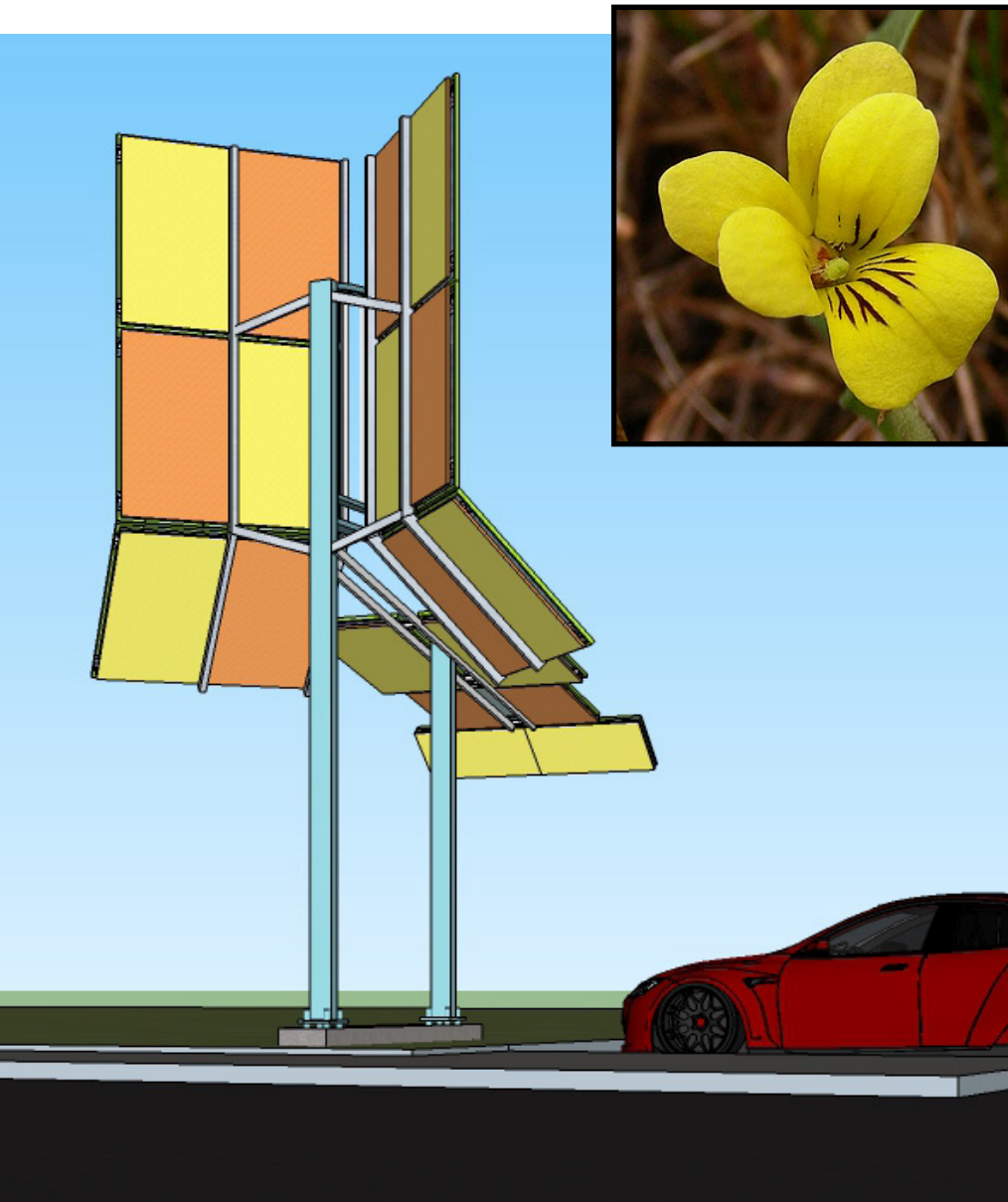
We will need to decide how best to build it and we'll need to make sure that it will not be blown over in high winds or otherwise become a danger to the public.



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## CONTEXT

Today we will visit the site again and imagine what it will be like to have the installation there.

How will people interact with it? Will it be a positive addition to the neighborhood?

What can we do better?

Now is the time to make changes before we head into detailed design.

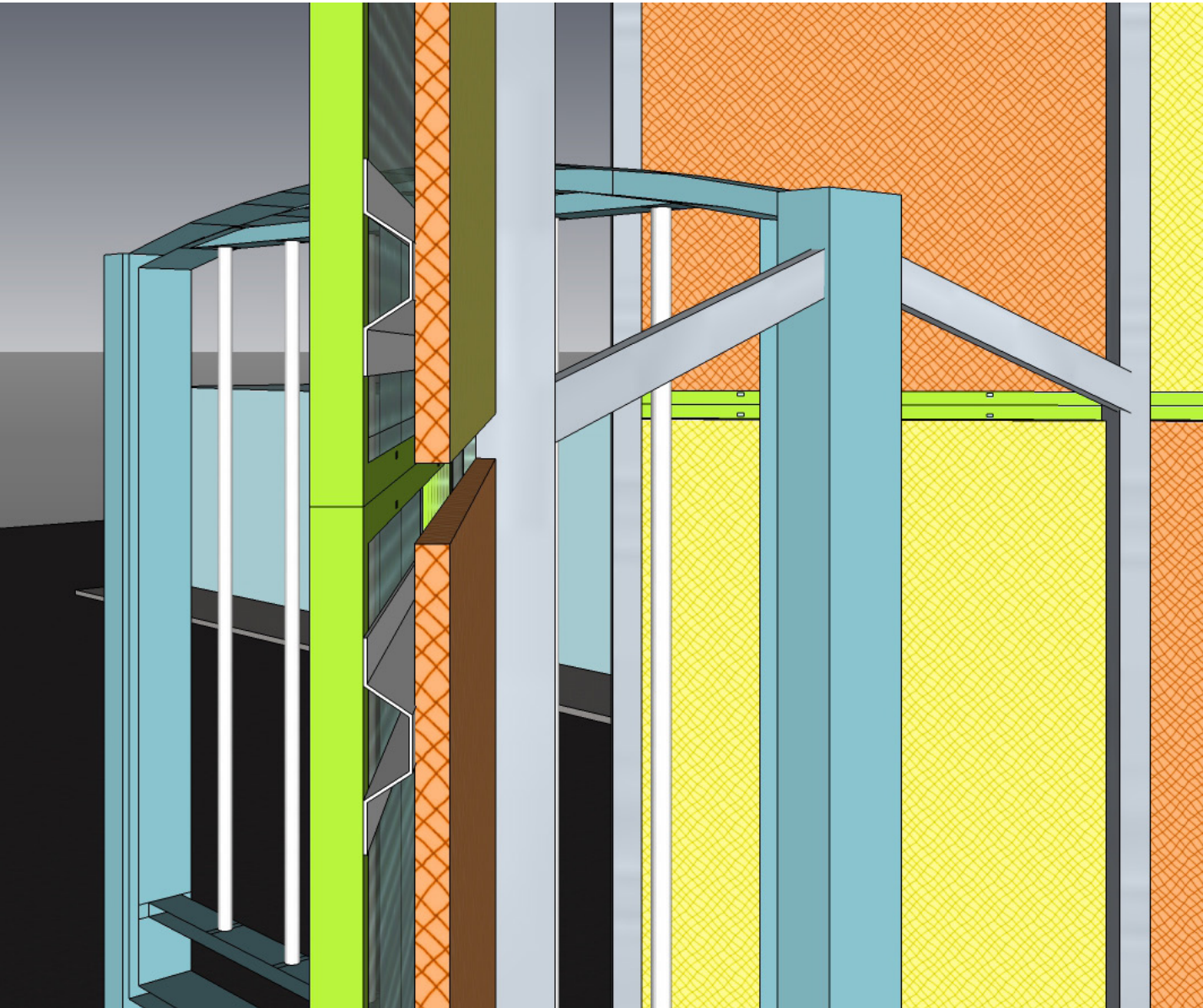
We will most likely recognize the old marquee by replacing its old 6' long fluorescent fixtures with new LED replacements.

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## DETAILS

The colors of the sun are sail fabric cloth wrapped around painted marine plywood. They are attached to the back of the metal channels that will hold the solar panels.

This will make sure that the panels have airflow behind them, which is important for their function. Solar panels get hot and operate more efficiently when allowed to ventilate.

Lighting is proposed to be a refurbishing of the existing fluorescent tubes with LED versions. It may be possible to purchase LEDs that can be controlled for color and brightness.

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