

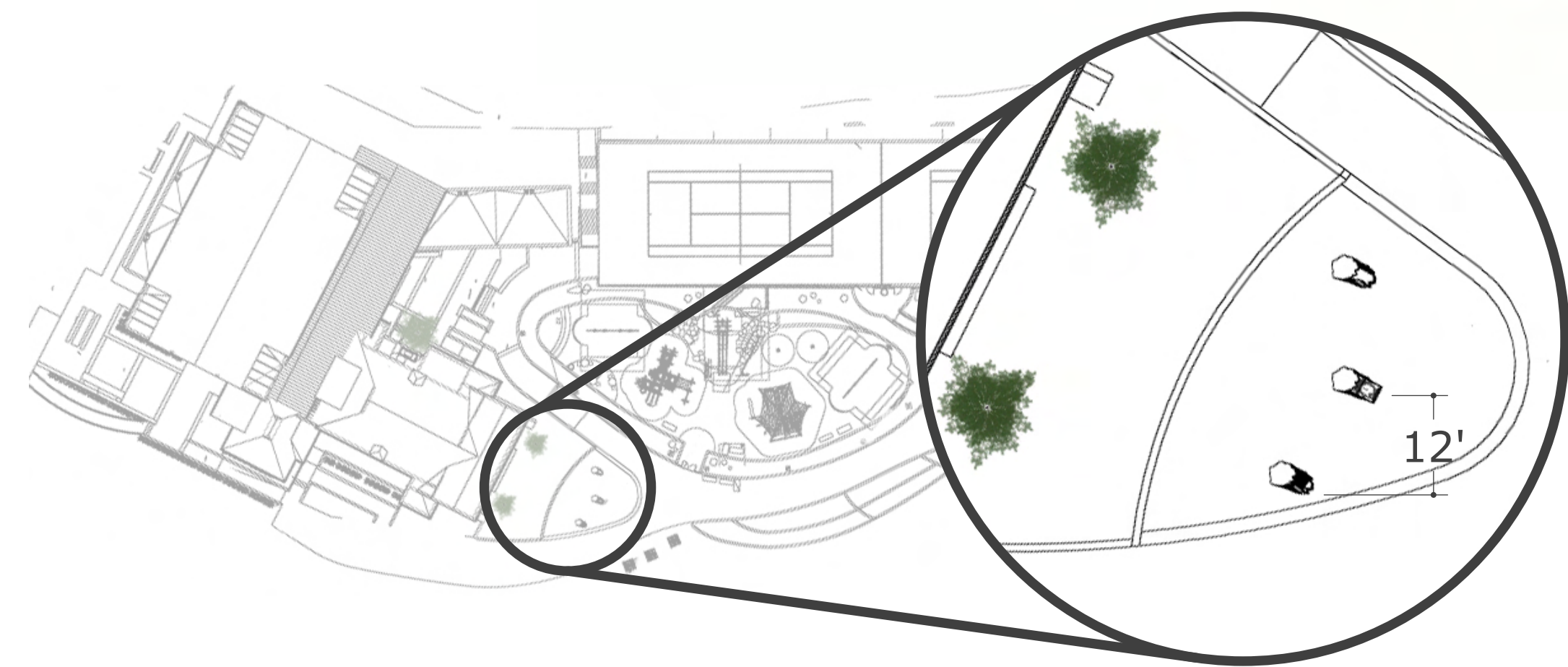
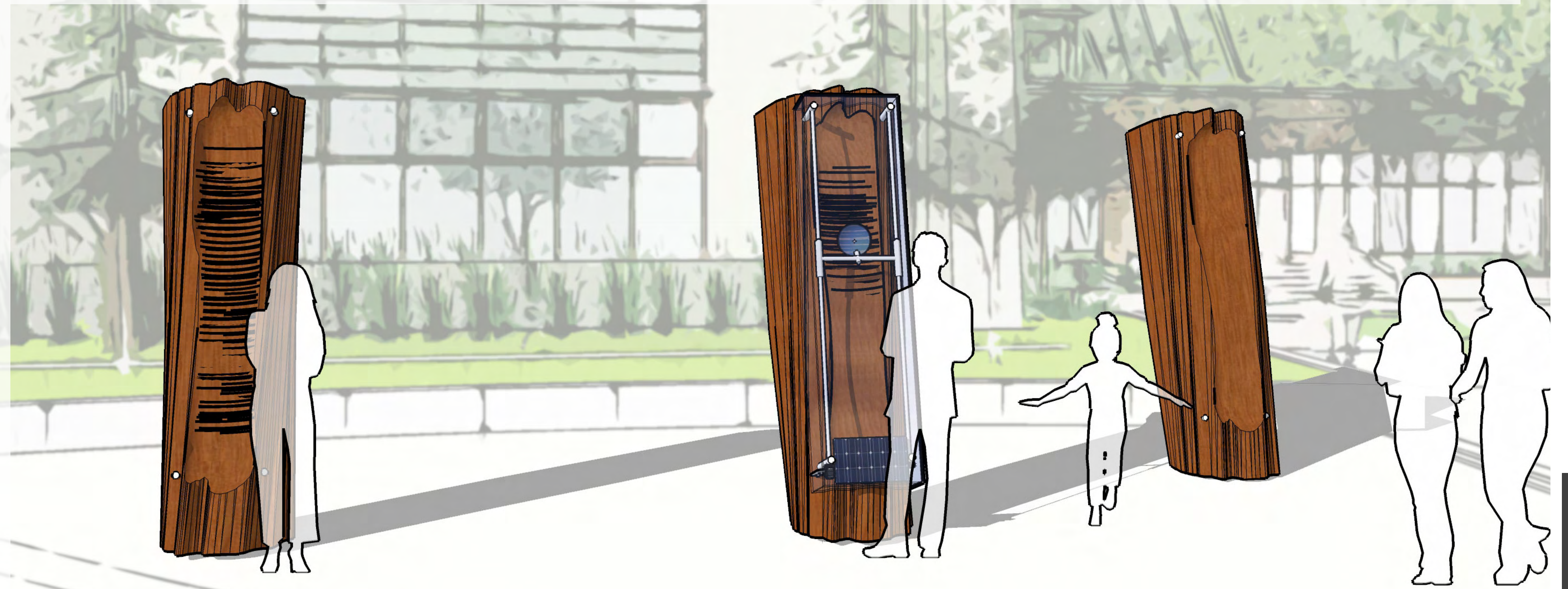
# solar totems

Solar Totems is a sculpture composed of three 30 inch diameter by 9 foot tall old growth redwood logs. The logs are installed upright in a triad arrangement on the open, south-facing plaza in front of the Glen Canyon Park Recreation Center. A solar powered heliograph mechanism with a spherical lens is mounted on one of the logs. The sun's rays are focused by the lens to lightly burn into the wood. As the sun moves across the sky, the burn becomes a line; preserving a record of sunshine periodically broken by fog or cloudy skies. The lens is advanced a small distance each day to create a distinct daily line. The mechanism records one year of daily atmospheric conditions. When the yearly record is complete, the heliograph is moved to another log, leaving a sculptural archive of daily variations in sunlight that park visitors can use to compare regional weather patterns from year to year.

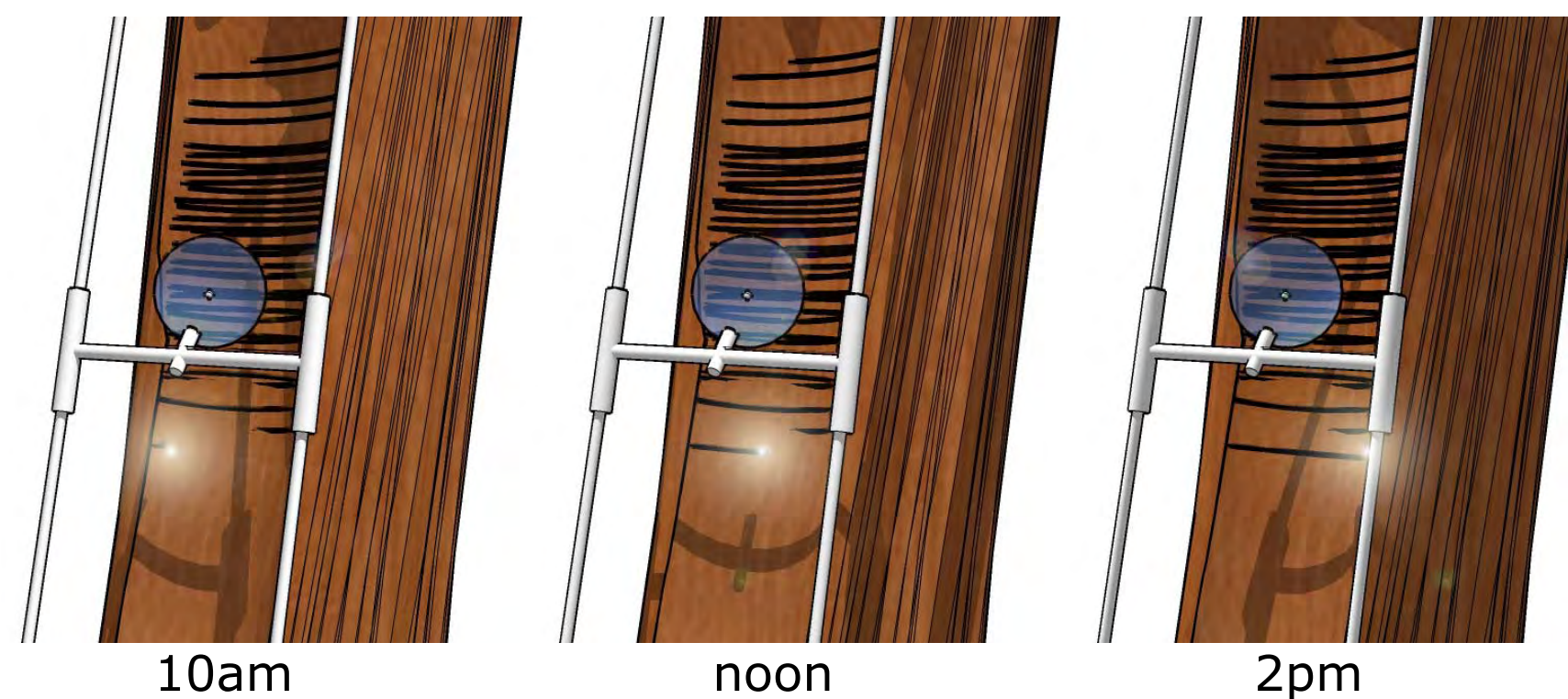
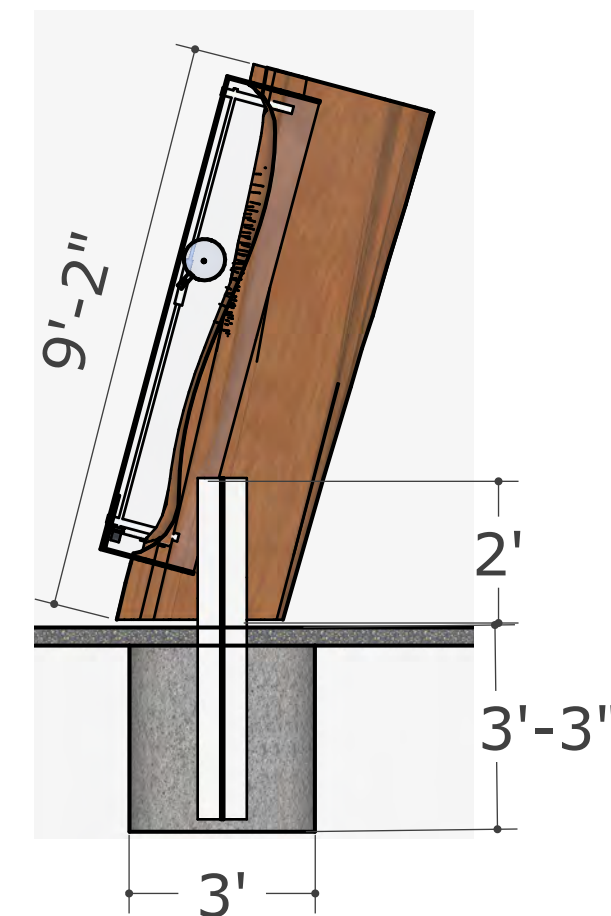
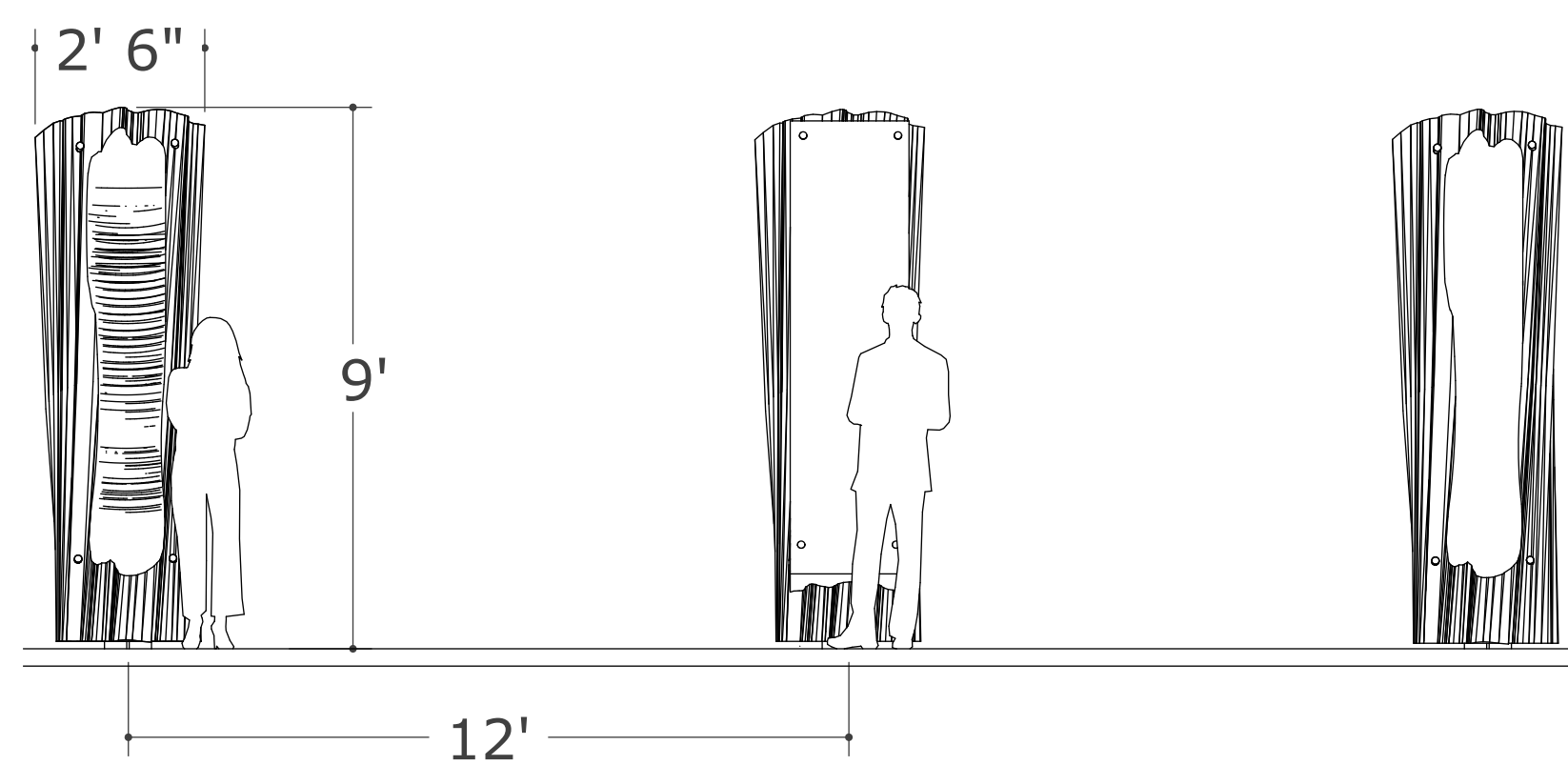
Solar Totems is inspired by 19<sup>th</sup> century meteorological instruments that similarly burned a record of the relative proportions of clear or cloudy skies that occurred during the day. But unlike the traditional instruments that produced a separate burn record for each day, or blurred multiple day records into one hard to read meta-pattern, the heliograph mechanism in Solar Totems writes a sequential solar text, day by day, line by line, like a written document. This stacked, linear arrangement of solar burn markings evokes letters, words, and sentences, linking solar script to manuscript, the traditional symbol of archived human knowledge from the cultural past.

The annual rings of the 200 year old logs themselves are a biological archive of seasonal weather conditions also created by sunlight. Reclaimed from the forest floor where they sat for 100 years since felling, these very rot-resistant redwood logs are repurposed receive this solar manuscript. Taken together, the three transformed logs turn the plaza into a kind of civic solar and atmospheric observatory, artistically expanding our understanding of place and connecting us to our environment through that understanding.

Inspired by 19<sup>th</sup> century meteorological instruments that used a spherical glass lens to burn a sunshine record on a substrate of wood or paper, Solar Totems is an aesthetic-scientific instrument, a kind of sculptural data-logger that creates an archive that helps the viewer consider the interaction of sun, weather and site.



A Campbell sunshine recorder was a 19<sup>th</sup> century meteorological instrument that utilized a glass sphere to focus the sun's rays and burn a record of clear or cloudy skies into a wooden bowl. Deployed from solstice to solstice, each bowl is an intriguing, informational and beautiful 6-month archive of solar conditions.



Carved with a mathematically specific hollow, a log receives the "writing" of the sun as its rays are focused by a spherical lens to lightly burn into the wood. As the sun moves across the sky, the burn becomes a line; preserving a record of sunshine periodically broken by fog or cloudy skies. The lens is advanced a small distance each day to create a distinct daily line.

